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**USAAVLABS TECHNICAL REPORT 70-73**

**FLIGHT LOADS INVESTIGATION OF CH-54A HELICOPTERS  
OPERATING IN SOUTHEAST ASIA**

By  
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January 1971

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**U. S. ARMY AIR MOBILITY RESEARCH AND DEVELOPMENT LABORATORY**  
**FORT EUSTIS, VIRGINIA**

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FORT EUSTIS, VIRGINIA 23604**

This report has been reviewed by the Eustis Directorate, U. S. Army Air Mobility Research and Development Laboratory and is considered to be technically sound.

The data presented were acquired from oscillograph recorders installed on U. S. Army CH-54A "Skycrane" helicopters conducting heavy-lift operations in Southeast Asia. These data indicate the missions flown and the accelerations associated with the combat deployment of this aircraft.

The report is published as an aid in establishing mission profiles and attendant design criteria for future aircraft.



Task 1F162204A14607  
Contract DAAJ02-68-C-0075  
USAAVLABS Technical Report 70-73  
January 1971

FLIGHT LOADS INVESTIGATION OF CH-54A HELICOPTERS  
OPERATING IN SOUTHEAST ASIA

Final Report

By

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Prepared by

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Dayton, Ohio

for

EUSTIS DIRECTORATE  
U. S. ARMY AIR MOBILITY  
RESEARCH AND DEVELOPMENT LABORATORY  
FORT EUSTIS, VIRGINIA

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### ABSTRACT

During a structural flight loads program on six CH-54A helicopters operating in the Vietnam theater, 1048 hours of 11-channel flight data were recorded between August 1968 and February 1970. To study the adequacy of a 200-hour data sample, as well as to derive appropriate environmental loads spectra, two sets of valid data, one representing 204 hours and the second 207 hours, were processed and analyzed according to four distinct flight phases, termed mission segments: (1) takeoff and ascent; (2) maneuver; (3) descent, flare, and landing; and (4) steady state. Data are presented in the form of time and occurrence tables, histograms, and exceedance curves. These data indicate the time spent in the mission segments and parameter ranges; the number of peak parameter values occurring in the ranges of the given parameter, during each of the mission segments, and in the ranges of one or more related parameters; and the time to reach or exceed given maneuver and gust normal load factors. The analysis of the two sets of data presentations revealed that the two samples differed little and compared closely in their distribution of the flight data.

## FOREWORD

Technology Incorporated, Dayton, Ohio, prepared this report to cover its efforts on a flight loads data program to collect, process, and analyze a 400-hour sample of valid flight data obtained from six CH-54A helicopters operating in Southeast Asia. This program was sponsored by the U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, under Contract DAAJ02-68-C-0075, Task 1F162204A14607. The project monitor for the Army was Mr. William T. Alexander.

The prime Technology Incorporated personnel engaged in this program were as follows: Mr. Henry C. Pender, project engineer, who supervised the installation and operation of the data recording system; Messrs. John F. Nash and Ronald I. Rockafellow, who directed the data processing; Mr. William E. Morrin, who prepared the computer programming for the data processing; and Mr. F. Joseph Giessler, who assisted in the data presentation and compilation.

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# LIST OF SYMBOLS

<u>Symbol</u>		<u>Computer Equivalent</u>	
$C_T$	thrust coefficient	CT	•
$C_T/\tau$	thrust coefficient ratio	CT/S	
$h_d$	density altitude, feet		•
$n_x$	longitudinal load factor	NX	
$n_y$	lateral load factor	NY	
$n_z$	normal load factor	NZ	
OAT	outside air temperature, °F		
$P_a$	atmospheric static pressure, inches of mercury		
R	rotor radius, feet		
V	airspeed, feet per second or knots		
W	gross weight, pounds		
u	rotor tip speed ratio	MU	
$\pi$	ratio of circumference to diameter of circle		
$\rho$	local air density, pounds per cubic foot		
$\sigma$	rotor solidity	S	•
$\Omega$	rotor angular velocity, radians per second		•

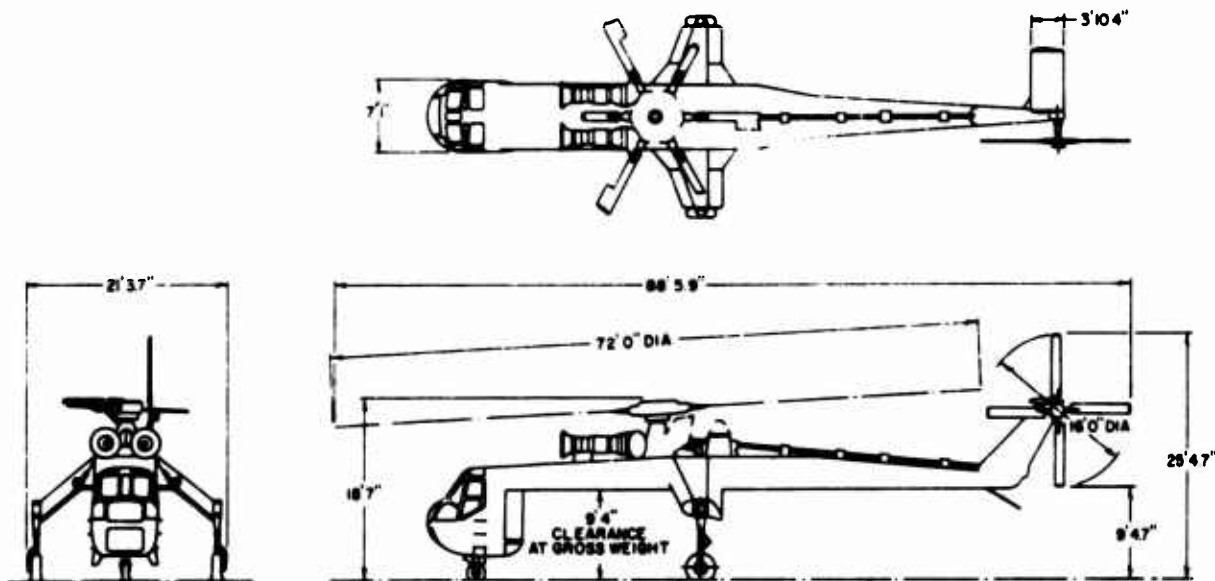
## INTRODUCTION

For the continued Army study of helicopter operations, a multichannel flight loads program was conducted on six CH-54A helicopters flying assault support missions in the Vietnam theater from August 1968 to February 1970. During this period, 1048 hours of in-flight data were recorded for each of 11 time-related parameters. The chosen parameters were selected to reflect the structural loads along the three major axes in the light of several helicopter variables. As reported in References 1 through 6, similar multichannel data were previously collected in six programs on Army helicopters, specifically the UH-1B, CH-54A, CH-47A, and AH-1G models. Of these programs, three—one each for the UH-1B, CH-54A, and CH-47A—were conducted under training conditions in the U.S., and three—one for the armed and armored CH-47A model, one for the cargo CH-47A model, and one for the AH-1G model—were conducted under combat conditions in Vietnam.

Figure 1 illustrates the CH-54A helicopter which is designed to carry heavy, outsized payloads or special-purpose vans or pods from either a single-point or a four-point suspension system. The single-point suspension system features a 100-foot cable with an hydraulically operated hoist and electrically actuated hook. Loads can be raised or lowered at a rate of 50 feet per minute. Twenty thousand pounds can be carried with the winch locked at a selected cable length. The four-point system uses four 6,000-pound capacity hoists mounted at hard points on the side of the fuselage. Each hoist has 50 feet of cable and a damping device to isolate aircraft or load vibration. The crew consists of a pilot, a copilot, and an aft-facing hoist operator.

The oscillograph type of recording system measured the following 11 in-flight variables: airspeed; altitude; normal, lateral, and longitudinal acceleration at the aircraft's center of gravity; outside air temperature; rotor rpm; collective pitch stick position; longitudinal cyclic pitch stick position; and each of two engine torques—all related in time. Additional information, called supplementary data, was extracted from "tally" sheets which the pilots filled in during flight. Supplementary data consisted of time, fuel, and cargo weight at takeoff and landing; base pressure and temperature at takeoff; mission type; and aircraft configuration. The data processing derived additional parameters: the instantaneous weight, the rotor tip speed ratio, and the ratio of the thrust coefficient to the rotor solidity. In addition, for the more meaningful interpretation of all parameters, the data for each flight were divided into four major phases, called mission segments: (1) takeoff and ascent; (2) maneuver; (3) descent, flare, and landing; and (4) steady state. Moreover, data

recorded during cargo pickups or drops while the aircraft were hovering were separated and grouped into "hoist," a subcategory of the steady-state mission segment.



Characteristics

Rotor diameter	72 ft
Rotor solidity	0.08649
Engines (two)	P&W JFTD-12A-4A
Des. max. gross weight	42,000 lb
Empty weight	19,234 lb

Limitations

Normal rated power	*4000 shp
Takeoff power	*4500 shp
Usable power (continuous)	*4000 shp
Usable power/des. max. gross weight	0.0953
Max. allowable airspeed	110 kn
	*each engine

Figure 1. Multiview Drawing of CH-54A Helicopter.

Whereas the five helicopter flight loads programs reported in References 1 through 5 were each designed to collect 200 hours of valid in-flight data, those for the AH-1G's, as reported in Reference 6, and the current CH-54A's were each intended to gather 400 hours of like data. Each of the 400-hour data samples was to be separated into two 200-hour data sets to make comparisons that would test the validity of 200 hours as an adequate data sample.

The objective of the CH-54A program, therefore, was twofold: (1) to present comprehensive flight loads data on the current operation of this helicopter model in the combat environment of Vietnam, and (2) to test again the validity of the 200 hours as an adequate data sample.



This report describes the installation and operation of the recording systems, details the data collection, defines the recorded and derived parameters, outlines the data processing and quality control, explains the data computations, and finally presents and analyzes the processed data. Both of the 200-hour sets of data were treated separately. The results for each set appear as histograms of the percentages of time within various parameter ranges; as "exceedance" curves, that is, curves of the number of flight hours required for a parameter to reach or exceed given levels; as tables of time distributed among the coincident ranges of two or more parameters; and as tables of peak frequencies in the coincident ranges of the peaking parameter and other variables.

## DATA COLLECTION

### AIRCRAFT INSTRUMENTATION

At the Southeast Asia facility of the Army's 273rd Assault Support Helicopter Company, an oscillographic system was initially installed in each of three CH-54A helicopters, identified by serial Nos. 68-18436, 66-18411, and 67-18421. Because of maintenance scheduling and combat loss, additional systems were installed in three more CH-54A's with serial Nos. 68-18437, 68-18443, and 67-18420. Except for serial No. 66-18411, whose operational problems prevented proper recorder functioning, valid data were acquired from each of these helicopters.

After each selected helicopter was equipped with the Class A provisions to accommodate its recording system, the components were installed as follows: a Century Model 409B oscillographic recorder to measure all 11 in-flight parameters and a Technology Incorporated Model 49776 bridge control unit to regulate the voltage signals from the various transducers were mounted on a shelf in the lower right equipment bay.

To derive airspeed, a Satham Model PM96TC $\pm$ 0.5-350 ( $\pm$  0.5 psid) pressure transducer was employed to measure the dynamic pressure. To derive pressure altitude, a Satham Model PA731TC-15-350 (0 to 15 psia) pressure transducer was employed to measure the absolute pressure. Both transducers were connected to the aircraft's pitot-static system.

For the three linear acceleration measurements, a B&F Model LF5-15-350 accelerometer was employed to sense the vertical acceleration; a B&F Model LF3-8-350 accelerometer to sense the longitudinal acceleration; and a Satham Model AJ17-3-350 accelerometer to sense the lateral acceleration. All accelerometers were mounted as close as possible to the helicopter's center of gravity.

A frequency-to-voltage converter and associated circuitry were incorporated in the recording system to measure the rotor rpm by sensing the frequency of the rotor tachometer generator.

A Minco Model S6B resistance thermal ribbon to measure the outside air temperature was installed on the outer skin under the cockpit area.

Two Lockheed Electronics Co. Model WR-8-15B position transducers were employed to sense the stick positions of the collective pitch and the longitudinal cyclic pitch controls. Both transducers were connected to each of the stick control tubes.

The engine torque was obtained from the output of the aircraft's torque generator. The torque from each engine was recorded separately.

The block diagram in Figure 2 illustrates the functional integration of the components making up the recording system.

#### OSCILLOGRAPHIC RECORDER

The Century Model 409B recorder with 14 data channels, each capable of recording a dynamic or a static parameter on a 3-5/8-inch-wide photosensitive paper, was employed in this program because of its inherent design to withstand severe shock and vibration and extreme environmental conditions. Eleven channels were used to record the in-flight variables. Of the remaining three channels, one was used to monitor the voltage supply, another was used to delineate a time pattern reflecting a 1-second cycling, and the last was used to trace a constant line for measurement reference.

The recording system operated from two types of power supplied by the helicopter: 110 v, 400 Hz ac, which after rectification was used in the special frequency-to-voltage circuit to measure the rotor rpm, and 28 vdc, which was used for all other operations. As manipulated by the pilot to record only in-flight data, a circuit breaker in the cockpit provided the means of controlling the recording system operation.

#### DATA RECORDING

During the period from August 1968 to February 1970, 1048.4 hours of in-flight data were recorded. For the desired two 200-hour data samples, 410.9 of these hours were processed and divided, for the most part chronologically, into 203.4 hours for Sample I and 207.5 hours for Sample II. Of the 410.9 hours, 351.2 were valid for all 11 parameters, and 59.7 were valid for all parameters except the 2 for engine torque. USAAVLABS had approved the use of the 59.7 hours. The distribution of the 351.2 hours is 182.6 in Sample I and 168.6 in Sample II, and that of the 59.7 hours is 20.8 in Sample I and 38.9 in Sample II.

Some of the discrepancies causing the invalidity of the recorded data were erratic trace deflection, no trace deflection, insufficient trace deflection, malfunction of the oscillogram drive motor, bad galvanometer, and no supplemental flight data. When developing the oscillogram and observing such discrepancies, the field technician was aware of the cause of most of the malfunctions and took remedial action as soon as possible. Occasionally, malfunctions in the helicopter system prevented the recording of the parameters intended to monitor the helicopter's operations, notably rotor rpm and engine torque.

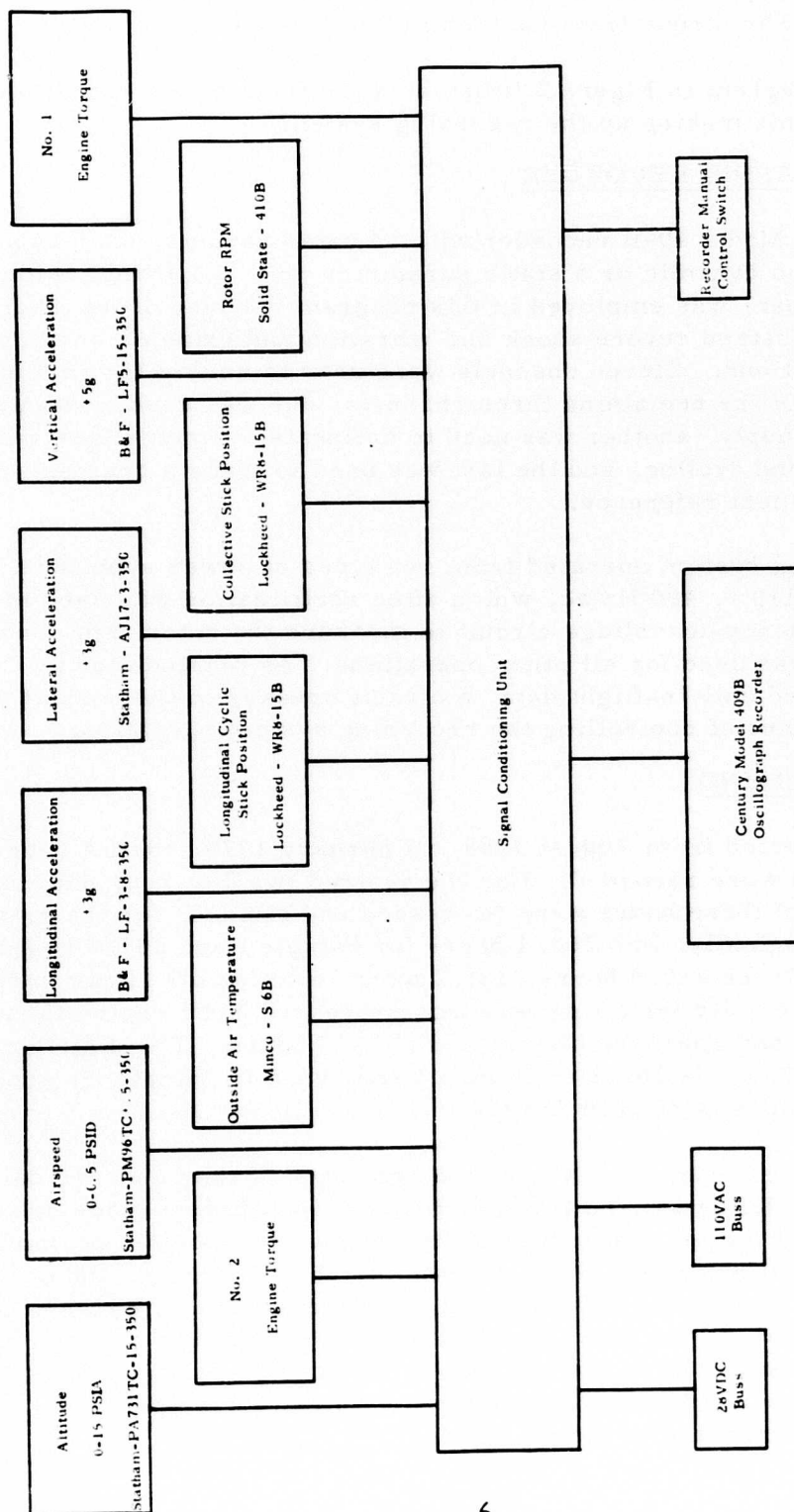


Figure 2. Block Diagram of CH-54A Instrumentation System.

During each flight the pilot logged the following information on a "tally" sheet: date, aircraft serial number, sortie number, task number, takeoff and landing base pressure and temperature, takeoff and landing fuel, cargo weight, maximum indicated airspeed and rotor rpm, departure and arrival time, and total flight time and distance. Since the foregoing information provided the supplemental data needed to process the in-flight data, the tally sheets, hereafter referred to as supplemental data sheets, were attached to the corresponding oscillograms.

## DATA DEFINITIONS

### RECORDED PARAMETERS

The 11 in-flight parameters recorded on the oscillograms against a time base were (1) altitude, (2) airspeed, (3) outside air temperature, (4) vertical acceleration, (5) lateral acceleration, (6) longitudinal acceleration, (7) rotor rpm, (8) No. 1 engine torque, (9) No. 2 engine torque, (10) longitudinal cyclic pitch control stick position, and (11) collective pitch control stick position. For each of these parameters, Table I lists the ranges selected to study the parameter relationships most practically and significantly.

With the assumption of a standard atmosphere prevailing during the data recording, the altitude and airspeed trace measurements proportional to the static pressure and the pitot-static pressure differential, respectively, were converted from pressure units to the conventional pressure altitude and indicated airspeed units. The outside air temperature was then used to convert the pressure altitude to the density altitude, the derived form of the altitude expressed in the final data. Of the remaining parameters, acceleration is represented as a load factor, engine torque as a percentage, and the control stick positions as percentages of full deflection with both the full-forward position of the cyclic pitch stick and the full-down position of the collective pitch stick being zero percent.

### COMPUTED PARAMETERS

From the fuel and cargo at takeoff and landing, as logged on the supplemental data sheets, the gross weight was computed for the start and end of each flight. A constant rate of fuel consumption was assumed to obtain an average weight-loss rate which was used to compute the instantaneous gross weight. Weight changes because of cargo drops or pickups were introduced at the times noted on the supplemental data sheets.

For each data reading point, two derived parameters were added to the data bank: (1) the rotor tip speed ratio, and (2) the ratio of the thrust coefficient to the rotor solidity.

The rotor tip speed ratio,  $u$ , was computed by

$$u = \frac{V}{\Omega R}$$

where

TABLE I. PARAMETER RANGES WITH CODE IDENTIFICATION

Mission Segments	Altitude (ft)	Indicated Airspeed (knots)	Climb Rate (ft/min)
1 Ascent	1 < 1000	1 < 40	1 < -2100
2 Maneuver	2 ≥ 1000 to < 2000	2 ≥ 40 to < 60	2 ≥ -2100 to < -1800
3 Descent	3 ≥ 2000 to < 5000	3 ≥ 60 to < 65	3 ≥ -1800 to < -1500
4 Steady State	4 ≥ 5000 to < 10000	4 ≥ 65 to < 70	4 ≥ -1500 to < -1200
	5 ≥ 10000 to < 15000	5 ≥ 70 to < 75	5 ≥ -1200 to < -900
	6 ≥ 15000	6 ≥ 75 to < 80	6 ≥ -900 to < -600
		7 ≥ 80 to < 85	7 ≥ -600 to < -300
		8 ≥ 85 to < 90	8 ≥ -300 to < 300
		9 ≥ 90 to < 95	9 ≥ 300 to < 600
		10 ≥ 95 to < 100	10 ≥ 600 to < 900
		11 ≥ 100 to < 105	11 ≥ 900 to < 1200
		12 ≥ 105 to < 110	12 ≥ 1200 to < 1500
		13 ≥ 110 to < 115	13 ≥ 1500 to < 1800
		14 ≥ 115 to < 120	14 ≥ 1800 to < 2100
		15 ≥ 120	15 ≥ 2100
Tip Speed Ratio, $\mu$	Thrust Coefficient, $C_T/\gamma$		Torque (psi)
1 < 0.0	1 < 0.06		1 < 10
2 ≥ 0.00 to < 0.05	2 ≥ 0.06 to < 0.09		2 ≥ 10 to < 20
3 ≥ 0.05 to < 0.10	3 ≥ 0.09 to < 0.12		3 ≥ 20 to < 30
4 ≥ 0.10 to < 0.15	4 ≥ 0.12 to < 0.15		4 ≥ 30 to < 40
5 ≥ 0.15 to < 0.20	5 ≥ 0.15 to < 0.18		5 ≥ 40 to < 50
6 ≥ 0.20 to < 0.25	6 ≥ 0.18 to < 0.21		6 ≥ 50 to < 60
7 ≥ 0.25 to < 0.30	7 ≥ 0.21		7 ≥ 60 to < 70
8 ≥ 0.30 to < 0.35			8 ≥ 70 to < 80
9 ≥ 0.35			9 ≥ 80 to < 90
$n_z$ (g)	$n_x$ & $n_y$ (g)	Weight (lb)	
1 < 0.2	1 < -0.40	1 < 21000	10 ≥ 90 to < 100
2 ≥ 0.2 to < 0.4	2 ≥ -0.40 to < -0.35	2 ≥ 21000 to < 23000	11 ≥ 100 to < 110
3 ≥ 0.4 to < 0.5	3 ≥ -0.35 to < -0.30	3 ≥ 23000 to < 25000	12 ≥ 110 to < 120
4 ≥ 0.5 to < 0.6	4 ≥ -0.30 to < -0.25	4 ≥ 25000 to < 27000	13 ≥ 120 to < 130
5 ≥ 0.6 to < 0.7	5 ≥ -0.25 to < -0.20	5 ≥ 27000 to < 29000	14 ≥ 130
6 ≥ 0.7 to < 0.8	6 ≥ -0.20 to < -0.15	6 ≥ 29000 to < 31000	
7 ≥ 0.8 to < 1.2	7 ≥ -0.15 to < -0.10	7 ≥ 31000 to < 33000	
8 ≥ 1.2 to < 1.3	8 ≥ -0.10 to < 0.10	8 ≥ 33000 to < 35000	
9 ≥ 1.3 to < 1.4	9 ≥ 0.10 to < 0.15	9 ≥ 35000 to < 36000	
10 ≥ 1.4 to < 1.5	10 ≥ 0.15 to < 0.20	10 ≥ 36000 to < 37000	
11 ≥ 1.5 to < 1.6	11 ≥ 0.20 to < 0.25	11 ≥ 37000 to < 38000	
12 ≥ 1.6 to < 1.7	12 ≥ 0.25 to < 0.30	12 ≥ 38000 to < 39000	
13 ≥ 1.7 to < 1.8	13 ≥ 0.30 to < 0.35	13 ≥ 39000 to < 40000	
14 ≥ 1.8 to < 2.0	14 ≥ 0.35 to < 0.40	14 ≥ 40000	
15 ≥ 2.0 to < 2.2			
16 ≥ 2.2 to < 2.4			
17 ≥ 2.4			
Outside Air Temperature (°F)	A/S Acceleration (ft/sec <sup>2</sup> )	Collective or Cyclic Steady Stick (%)	Collective or Cyclic Stick Peaks (%)
1 < 0.0	1 < -15	1 < 10	1 < -40
2 ≥ 0.0 to < 10	2 ≥ -15 to < -12	2 ≥ 10 to < 20	2 ≥ -40 to < -30
3 ≥ 10 to < 20	3 ≥ -12 to < -9	3 ≥ 20 to < 30	3 ≥ -30 to < -20
4 ≥ 20 to < 30	4 ≥ -9 to < -6	4 ≥ 30 to < 40	4 ≥ -20 to < -10
5 ≥ 30 to < 40	5 ≥ -6 to < -3	5 ≥ 40 to < 50	5 ≥ -10 to < 10
6 ≥ 40 to < 50	6 ≥ -3 to < 3	6 ≥ 50 to < 60	6 ≥ 10 to < 20
7 ≥ 50 to < 60	7 ≥ 3 to < 6	7 ≥ 60 to < 70	7 ≥ 20 to < 30
8 ≥ 60 to < 70	8 ≥ 6 to < 9	8 ≥ 70 to < 80	8 ≥ 30 to < 40
9 ≥ 70 to < 80	9 ≥ 9 to < 12	9 ≥ 80 to < 90	9 ≥ 40
10 ≥ 80 to < 90	10 ≥ 12 to < 15	10 ≥ 90	
11 ≥ 90	11 ≥ 15		

$V$  = airspeed, ft/sec  
 $\Omega$  = rotor angular velocity, rad/sec  
 $R$  = rotor radius, ft

And the ratio of thrust coefficient to the rotor solidity,  $C_T/\sigma$ , was computed by

$$C_T/\sigma = \frac{W}{\rho \pi R^2 (\Omega R)^2}$$

where

$C_T$  = thrust coefficient  
 $W$  = gross weight, lb (instantaneous)  
 $\rho$  = air density at altitude, slugs/ft<sup>3</sup>  
 $\sigma$  = rotor solidity

### MISSION SEGMENTS

For the more meaningful analysis of the helicopter performance and loads, the data for each flight were separated into four mission segments: (1) takeoff and ascent; (2) maneuver; (3) descent, flare, and landing; and (4) steady state. As the transient, or unsteady, regimes of flight, the first three segments were distinguished from the steady-state segment by the variation in the stick position, airspeed, and altitude traces. The segments were identified and defined as follows: Mission Segment 1 (takeoff and ascent) included both the takeoff and climb to the initial cruise altitude and all unsteady ascents to other altitudes. Mission Segment 2 (maneuver) included all those altitude changes not appearing in Segments 1 or 3. Mission Segment 3 (descent, flare, and landing) included the unsteady part of flare and landing and all other unsteady descents. Mission Segment 4 (steady state) included cruise, hover, steady ascent (after the initial climb), and steady descent. Flare and landing initiated from hover was included in Mission Segment 4. Steady-state flight regimes were evidenced by minimal fluctuations of the stick position traces about mean values and the constancy or smooth change of the airspeed and altitude traces. To study the accelerations encountered during either a cargo pickup or a cargo drop while the aircraft were hovering, the data covering these operations were separated and grouped into "hoist," a subcategory of the steady-state mission segment. The hoist data are reported separately in Tables VIII and XLIV, which give torque values, and in Tables XXVI, XXVII, LXII, and LXIII, which give maneuver  $n_z$  peak distributions. All other tables for steady-state documentation include the hoist data.



## DATA PROCESSING

### DATA EDITING

Each oscillogram is examined by the data processing editors for evidence of any instrumentation anomaly such as a missing trace or improper sensitivity. Any record discovered as faulty is classified as malfunction data and is not processed. The editors then time all acceptable records and identify the bounds for the mission segments in each flight.

After demarcating the flights into mission segments, the editors marked the traces to govern the data reading. The normal acceleration trace was marked wherever a peak met the following two conditions: (1) the peak fell outside prescribed threshold levels ( $\pm 0.2g$  about the  $1.0g$  mean), and (2) the peak had a rise and fall (or fall and rise) that were each 50 percent of the peak value or  $0.2g$ , whichever was greater. Although the prescribed thresholds were  $0.8$  and  $1.2g$ , the editors used levels of  $0.84$  and  $1.16g$  to ensure the inclusion of all valid peaks. However, any of the peaks read within the fixed threshold levels of  $0.8$  and  $1.2g$  were eliminated during the computer processing. In addition, the editors identified each selected peak as being maneuver- or gust-induced. To determine whether a peak was induced by a maneuver or a gust, the editors noted the behavior of the stick position traces. Whenever the peak was the result of maneuvering, one or both of the stick traces would always deflect just before and in the same sense as the peak. Ascertaining the gust-induced peaks required either that both stick position traces be steady or that any movement of these traces just before the peak be in the sense opposite that of the peak.

The editors marked primary peaks on the lateral and longitudinal acceleration traces wherever they deflected outside the prescribed threshold of  $\pm 0.1g$ . These peaks were not identified as being maneuver- or gust-induced. As before, to ensure inclusion of all valid peaks, the editors used levels of  $\pm 0.097g$  instead of the  $\pm 0.1g$ . Again, however, any peaks read within the prescribed threshold of  $\pm 0.1g$  were eliminated during the computer processing.

In treating the two stick position traces, the editors marked those peaks whose rise or fall was 10 percent of the full stick travel and at least 10 percent from the normal value. Each normal value depended on the mission segment. For the steady-state mission segment, the normal values were the steady values of the stick positions just before and after the peak. For the three transient mission segments (where no "steady" stick positions prevailed), an arbitrary set of normal values was chosen to approximate the stick positions during hover. The selected values are listed by aircraft serial number in Table II.

TABLE II. CONTROL STICK NORMAL VALUES USED DURING  
TRANSIENT MISSION SEGMENTS

Aircraft Serial No.	Longitudinal Cyclic Normal %	Collective Normal %
68-18436	68.8	49.4
68-18437	71.8	47.5
67-18421	60.5	57.6
68-18443	65.9	43.3
67-18420	62.2	50.4

In each of the three transient mission segments, all traces except those for the stick positions were marked when the acceleration or stick position traces peaked. During all mission segments, however, all traces except that for acceleration were marked at critical points to permit an adequate representation of the parameters. At the peaks of normal acceleration,  $n_z$ , the corresponding values of longitudinal acceleration,  $n_x$ , and lateral acceleration,  $n_y$ , were read. At the peaks of  $n_x$  and  $n_y$ , the corresponding values of  $n_z$  and cyclic stick position were read.

The peak values of the three linear accelerations were measured from normal positions of the respective traces. For both the vertical acceleration,  $n_z$ , and the lateral acceleration,  $n_y$ , the normal position was defined when the helicopter was at rest. For the longitudinal acceleration,  $n_x$ , the normal position was defined when the helicopter cruised at a 90-knot airspeed. The positive sense of the longitudinal load factor,  $n_x$ , is acceleration forward, and the positive sense of the lateral load factor,  $n_y$ , is acceleration to the right.

#### DATA READING AND QUALITY CONTROL

All data points selected during the editing were measured on semiautomatic oscillogram readers which transcribed the measurements directly to punched cards. When all data were extracted from a flight, a printout of the cards was given to the Quality Control Section for preliminary data checking. Using standard quality control techniques, this section manually remeasured random points comprising an adequate sample and compared the measurements with those produced by the semiautomatic readers. The differences between the two sets of readings were used to establish the mean and standard deviations as a control of the desired reading accuracy. The flights whose measurements did not meet the established accuracy standard were reread by the semiautomatic readers.

In addition to obtaining accurate values, this procedure ensured a uniform interpretation and measurement of the traces.

When all data had been processed, the mean and standard deviations were calculated for the entire data sample. Assuming a normal distribution of reading errors, 99.7 percent of the readings should be within three standard deviations of the true values. Based on average calibration values, Table III shows the three standard deviations for each parameter.

TABLE III. DATA READING VARIATIONS BY PARAMETER

<u>Parameter</u>	<u>3<math>\sigma</math> Variation (99.7% confidence limit)</u>
Altitude	$\pm 182$ ft (at 1000 ft)
Airspeed	$\pm 1.88$ kt (at 120 kt)
$n_x$	$\pm 0.033g$
$n_y$	$\pm 0.035g$
$n_z$	$\pm 0.029g$
OAT	$\pm 1.38^\circ F$
Rotor rpm	$\pm 7.3$ rpm
Engine Torque 1	$\pm 9.7\%$
Engine Torque 2	$\pm 10.5\%$
Collective Pitch	$\pm 2.8\%$
Cyclic Pitch	$\pm 3.0\%$

Of the 410 hours of valid data processed for this program, 131 hours were edited and read by the U. S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, and the remainder were edited and read by Technology Incorporated. The procedures followed by both organizations were identical with the exception of the reading increment. The Fort Eustis data was read with an increment of 100 counts per inch and the Technology Incorporated data was read at 200 counts per inch.

#### DATA COMPUTATIONS

The load factor,  $n_z$ , for each normal acceleration peak was measured directly from the oscillogram trace. However, to present load factors for positive and negative peaks conveniently, an incremental normal load factor,  $\Delta n_z$ , was derived from each  $n_z$  value by using the relationship

$$\Delta n_z = n_z - 1.0$$

The following equation (see Reference 6) was used to compute density altitude, since this parameter is normally used in describing helicopter performance:

$$h_d = 145,300 \left[ 1 - \left( \frac{518.4 P_a}{29.92 (OAT + 460)} \right)^{0.235} \right]$$

Since the instrument installation correction to derive the calibrated airspeed was judged to be negligible, only indicated airspeeds were considered. Rotor rpm and outside air temperature were computed by applying linear calibrations to the trace measurements. With the displacements of the stick position traces representing the deflections of the longitudinal cyclic stick from the full-forward position and the deflections of the collective stick from the full-down position, the respective stick positions were computed from the trace measurements in units of percent of full deflection. By an approximate differentiation of the altitude trace, the rate of climb was computed continuously during each segment. At the same time that the rate of climb was computed, the "longitudinal acceleration," or rate of change of airspeed, was derived by an approximate differentiation of the airspeed trace.

## DATA PRESENTATION

Some 400 hours of valid data were separated into two sets of about 200 hours each, identified as Sample I and Sample II, to test the adequacy of the 200-hour data sample. Sample I consists of 203 hours and Sample II of 207 hours. Most of the Sample I data was recorded before the Sample II data. Some of the data overlap chronologically because of the order of processing.

The data presented in this report consist of two types of figures and two types of tables. The figures are (1) histograms of the percentages of time within various parameter ranges and (2) plots of the time in hours to reach or exceed given levels of the incremental vertical load factor,  $\Delta n_z$ . For convenience, these plots have been called "exceedance curves." The two tabular types are (1) flight time distributed among the coincident ranges of two or more parameters and (2) the vertical acceleration peak frequencies distributed among the ranges of the vertical load factor,  $n_z$ , and the coincident ranges of other variables.

## DISCUSSION OF FIGURES

The results from the two data samples are summarized in Figures 3 through 28. In each type of graphic representation, the graphs for Samples I and II are presented consecutively.

Figures 3 and 4 for Samples I and II, respectively, show the breakdown of flight time into the four mission segments. The similarity of the two samples is quite evident. The low percentage of maneuver time is due to the cargo operation of the CH-54A. The large amount of time spent in ascent and descent as compared with that in steady state is attributed to relatively short flights. In contrast, the data reported in Reference 2 for peacetime operation had 6.86% of flight time in ascent, 1.92% in maneuver, 12.6% in descent, and 78.62% in steady state.

Figures 5 and 6 present the time spent in each weight range broken down by mission segment. The distributions of the two samples are again quite similar. Whereas the lower weights have a larger percentage of time in descent, the higher weights show a larger percentage of time in ascent. With the time in each weight range broken down by mission segment, Figures 7 and 8 show a double-peaking distribution for gross weight: the lower peak is between 25,000 and 27,000 pounds and the higher peak is near 40,000 pounds. Thus the CH-54A in the reported program spent over 90% of the flight time either below 29,000 pounds or above 37,000 pounds. The maximum gross weight in Sample I was 44,009 pounds, and that in

Sample II was 42,963 pounds. Figures 9 and 10 present the rotor rpm distributions in each mission segment. In both samples more than 75% of the time was spent in the 185- to 195-rpm range. In Sample I, the maximum rpm of 198 occurred at 60 knots, 40,344 pounds, and 2486 feet; in Sample II, the maximum rpm of 203 occurred during a hover at 25,009 pounds and 2139 feet.

Figures 11 and 12 show the distribution of time in ranges of density altitude. Both samples show nearly the same distributions. Related to the altitude distribution is the distribution of outside air temperature shown in Figures 13 and 14. These again show similar distributions for each data sample. The rate-of-climb distributions shown in Figures 15 and 16 are again very similar for both data samples. The small increments of descent time in the ascent segment and the small increments of ascent time in the descent segment are due to short altitude corrections in either a generally ascending or descending part of a flight. These increments were not sufficiently long to warrant separate identification.

The torque range distributions in the mission segments are presented in Figures 17 and 18. Each engine torque is presented separately. Whereas the No. 1 torque distributions for both samples are generally uniform in the ranges, the No. 2 torque distribution for Sample II is slightly more concentrated in the mid-ranges.

Figures 19 and 20 distribute the flight time in airspeed ranges. The two samples are in good agreement. No airspeed over 120 knots was recorded.

Figures 21 through 24 represent the maneuver vertical acceleration peaks recorded during the program. The occurrence of these peaks is expressed as the hours to reach or exceed given values of the incremental value,  $\Delta n_z$ . Both positive and negative values are shown. In general, both samples indicate that all mission segments encountered similar peaks. As mentioned in the data processing section, the load peaks encountered during load pickups and drops were separated and grouped under hoist, a subcategory of the steady-state mission segment. Figures 21 and 22 show that all the load peaks above  $\Delta n_z = 0.5$  were recorded during hoist which accounted for only 0.26 and 0.23 hours in Samples I and II, respectively. The highest  $n_z$  peak of 1.88g, which was recorded in the Sample I data, occurred during a hoist at a gross weight of 40,100 pounds and an altitude of 1641 feet. Figures 23 and 24, which present the same data broken down by gross weight, show that the high values of  $\Delta n_z$  generally occurred at low gross weights. Figures 25 and 26 show the relationship between the maneuver incremental load factor peaks,  $\Delta n_z$ , and the tip speed ratio,  $u$ . All these figures indicate that the results from the two data samples compare very closely.

The composite gust vertical acceleration peaks are summarized in Figures 27 and 28. The gust data in Sample I is slightly more severe than that in Sample II; however, the general trend is the same.

### DISCUSSION OF TABLES

All final computer printouts resulting from the processing of the 410 hours of valid data are presented in Tables IV through XXXIX for the Sample I data and in Tables XL through LXXV for the Sample II data. All times in these tables were rounded off to the nearest tenth of a minute. Therefore, the "TOTAL" time and the individual times in each table are accurate to within 0.05 minute. However, since the individual times comprising the respective totals were summed before the totals were rounded off, the sum of individual times may differ from the corresponding printed total time by some tenths of a minute. Any time between 0 and up to but not including 0.05 minute was printed as "0.0", and no time measured was printed as "0.". Tables having neither points nor time were not printed.

Table headings are arranged so that the first-mentioned variable refers to the horizontal ranges at the top of the table and the second-mentioned variable refers to the vertical ranges at the left of the table. Where a third or a fourth variable is given, it is followed by its range in the heading. As an example, the heading "MINUTES FOR ALTITUDE VS AIR-SPEED BY WEIGHT 6000 BY MISSION SEG. ASCENT" indicates the time spent in coincident ranges of altitude and airspeed at a weight between 6000 and 7000 pounds during the ascent mission segment. Note that all printed range values are the lower limits.

Tables IV through IX for Sample I and Tables XL through XLV for Sample II give the flight time recorded in the coincident ranges of the various variables. In the tables containing engine torque data, the total time is less than that reported for the other parameters, as explained above under Data Recording.

To analyze the stick position variations, Tables X through XXIII for Sample I and Tables XLVI through LIX for Sample II present the frequencies of stick position peaks in the coincident ranges of each of the two stick positions and other variables.

For the review of the normal accelerations encountered, Tables XXIV through XXVII for Sample I and Tables LX through LXIII for Sample II present the frequencies of both the maneuver and the gust normal acceleration peaks in the coincident ranges of incremental normal load factor and other variables.

Tables XXVIII through XXXIII for Sample I and Tables LXIV through LXIX for Sample II present the frequencies of the longitudinal and lateral acceleration peaks in the coincident ranges of the corresponding load factor and other variables.

Finally, for the correlation of the accelerations along each of the three major axes, Tables XXXIV through XXXIX for the Sample I data and Tables LXX through LXXV for the Sample II data present the peak frequencies of each type of acceleration in the coincident ranges of the given type of acceleration and of each of the other two types.



### SUMMARY AND CONCLUSIONS

The CH-54A program produced twofold results: (1) a set of comprehensive loads and operational data defining the CH-54A performance in the combat environment of Vietnam, and (2) evidence that 200 hours of recorded data serves as a valid data sample. The resultant data may be used to determine the loading spectrum for cyclic load tests on helicopter structures as well as to conduct a parametric fatigue analysis and, thereby, project the safe life of each helicopter. The comparison of the histograms and exceedance curves for the first 203 hours of data (Sample I) and the second 207 hours (Sample II) indicates that the two data samples closely agree.

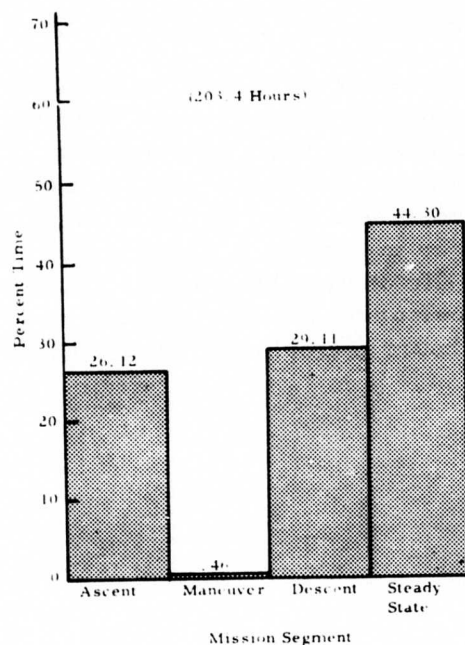


Figure 3. Percentage of Time in Each Mission Segment (Sample I).

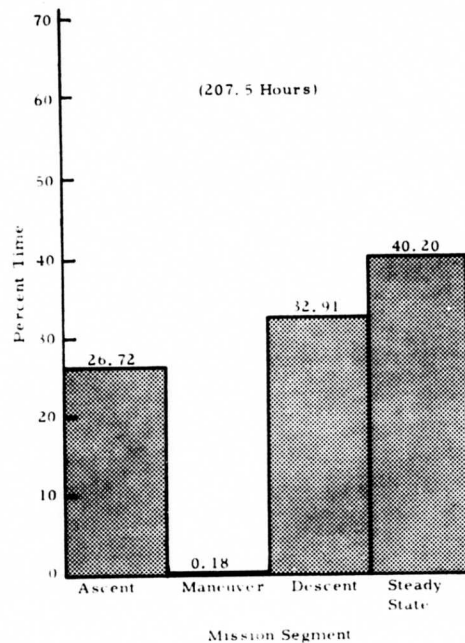
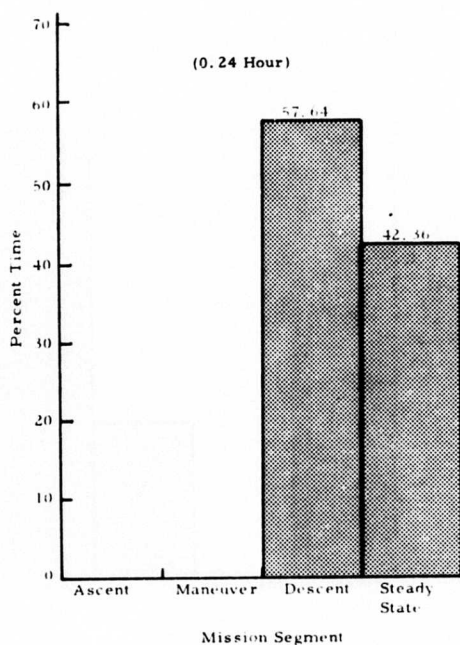
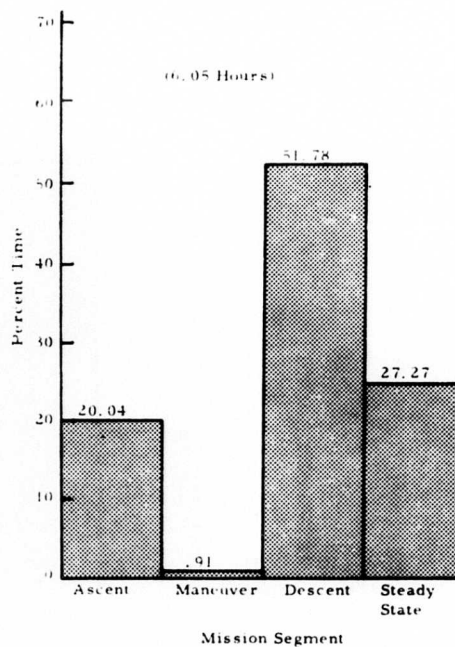


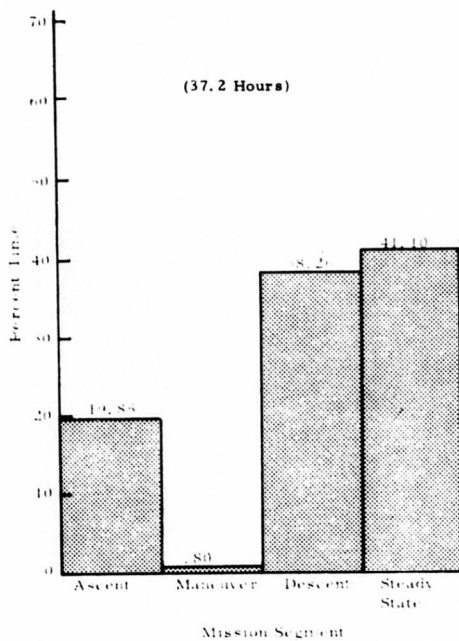
Figure 4. Percentage of Time in Each Mission Segment (Sample II).



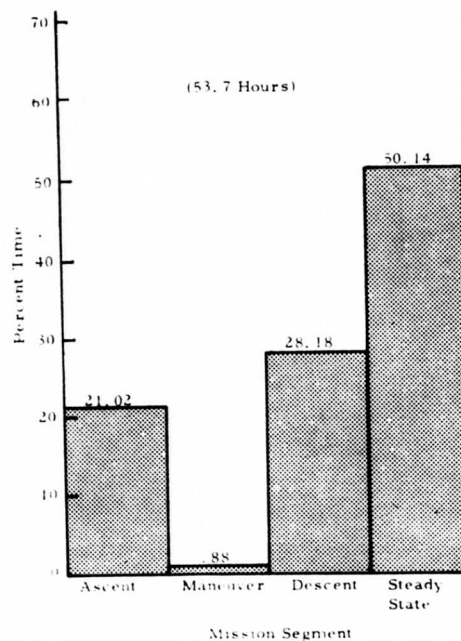
a) Less than 21,000 lb



b) 21,000 to 23,000 lb

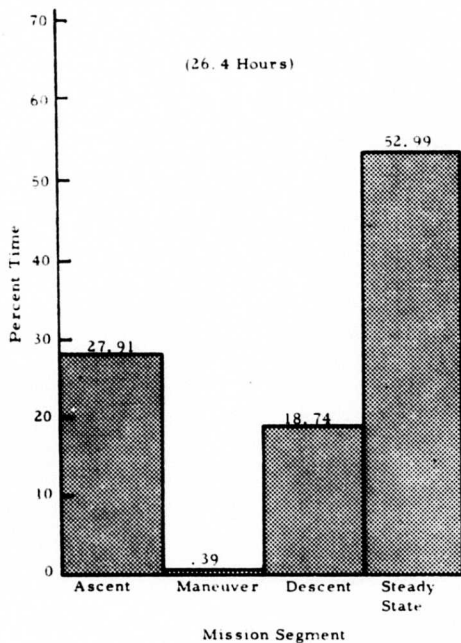


c) 23,000 to 25,000 lb

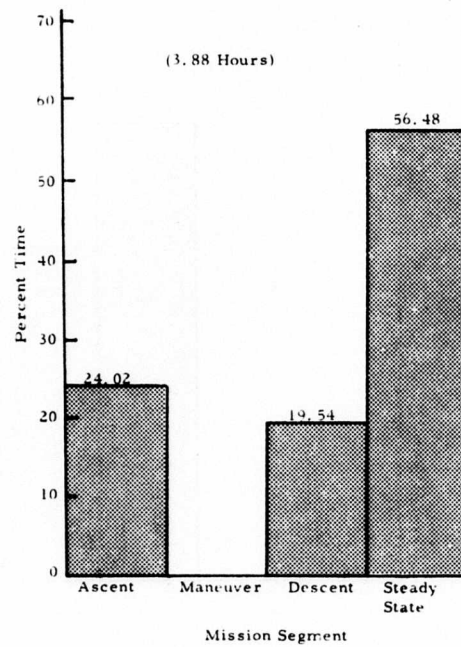


d) 25,000 to 27,000 lb

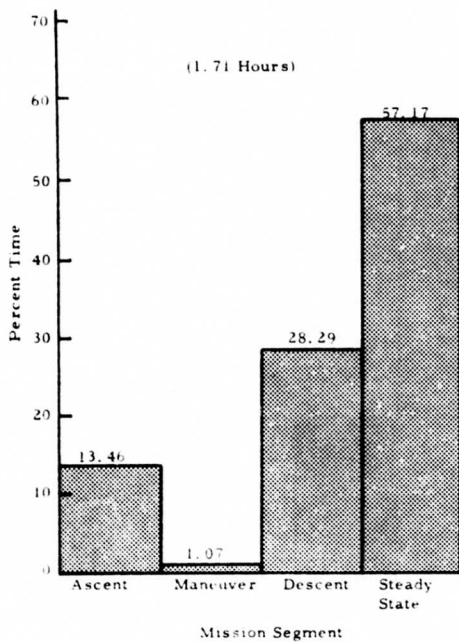
Figure 5. Flight Time in Each Gross Weight Range Broken Down by Percentage of Time in Each Mission Segment (Sample I).



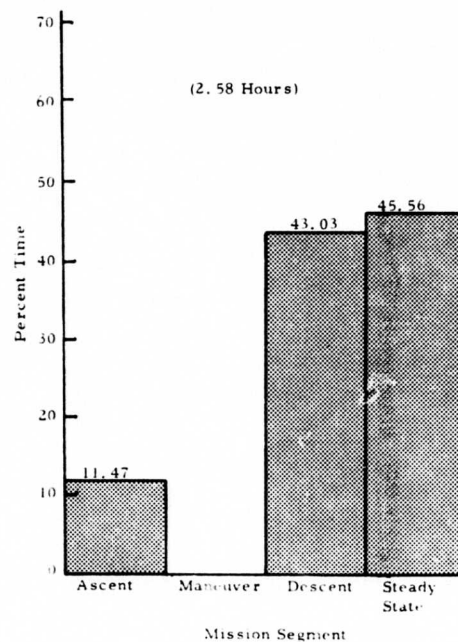
e) 27,000 to 29,000 lb



f) 29,000 to 31,000 lb

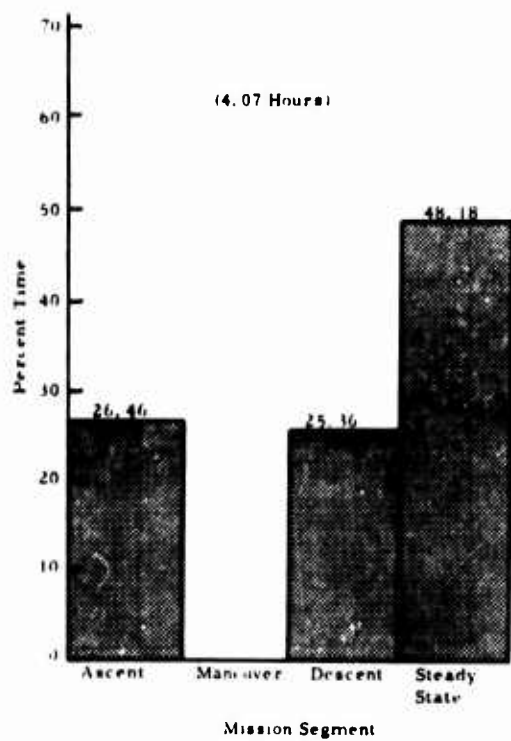


g) 31,000 to 33,000 lb

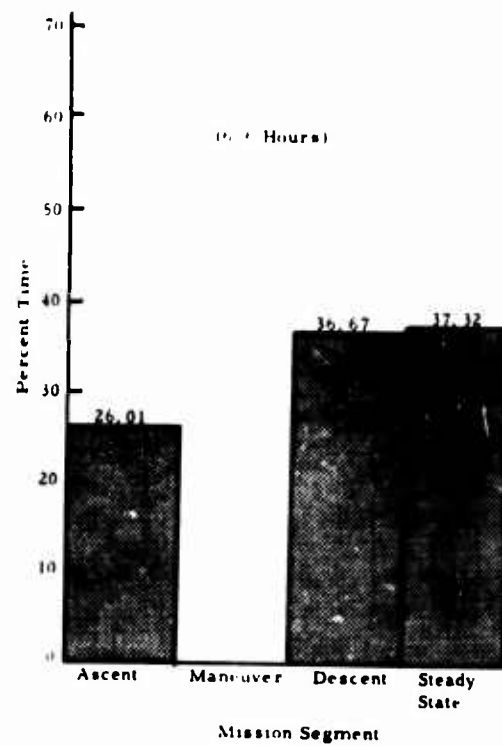


h) 33,000 to 35,000 lb

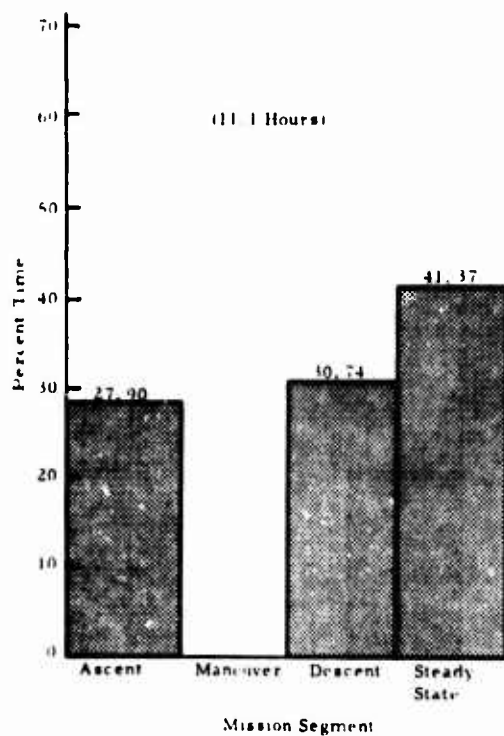
Figure 5 - Continued



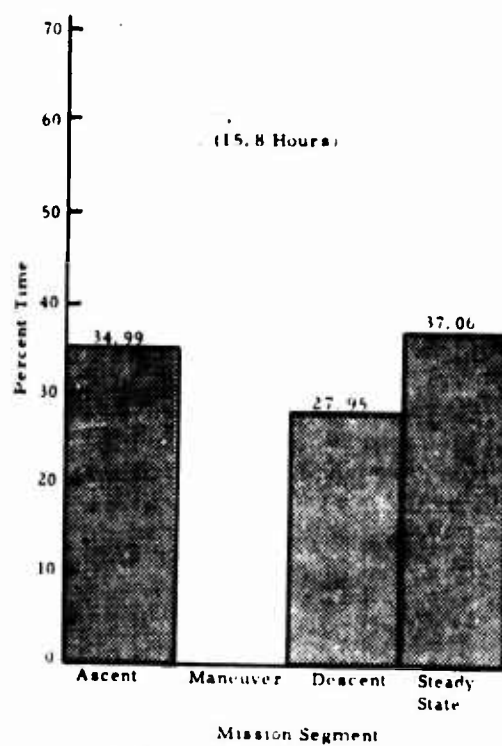
i) 35,000 to 36,000 lb



j) 36,000 to 37,000 lb

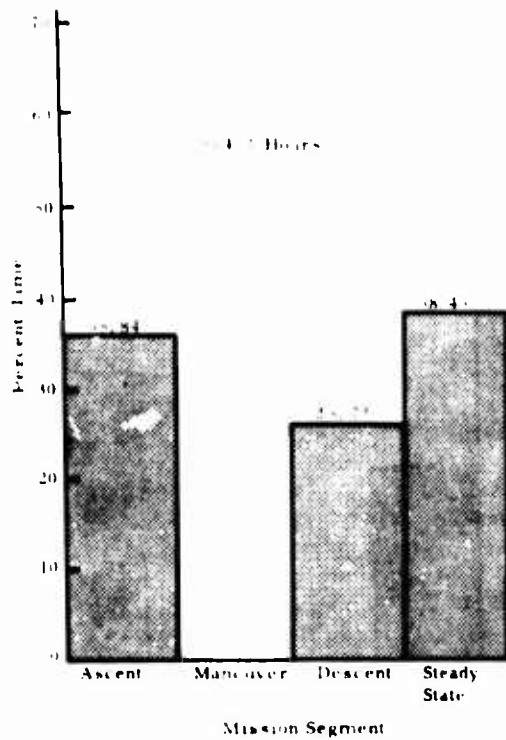


k) 37,000 to 38,000 lb

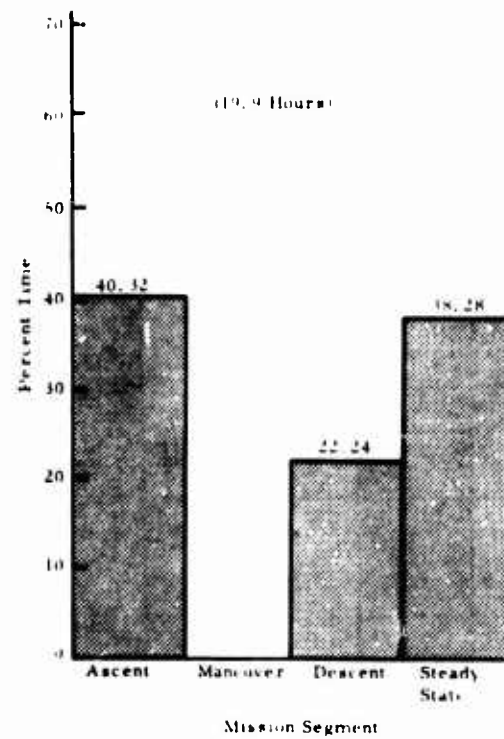


l) 38,000 to 39,000 lb

Figure 5 - Continued

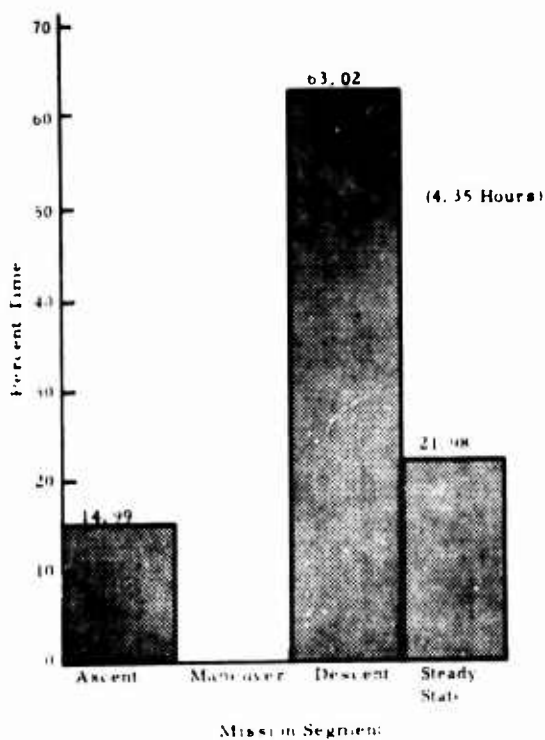


m) 39,000 to 40,000 lb

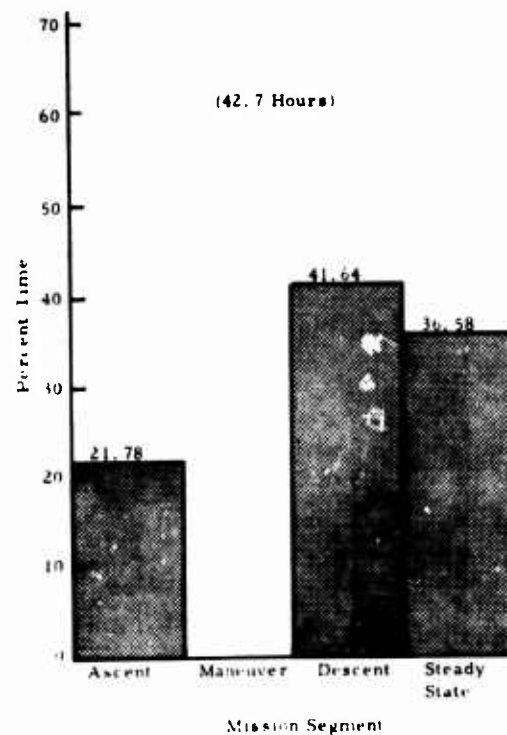


n) Above 40,000 lb

Figure 5 - Concluded

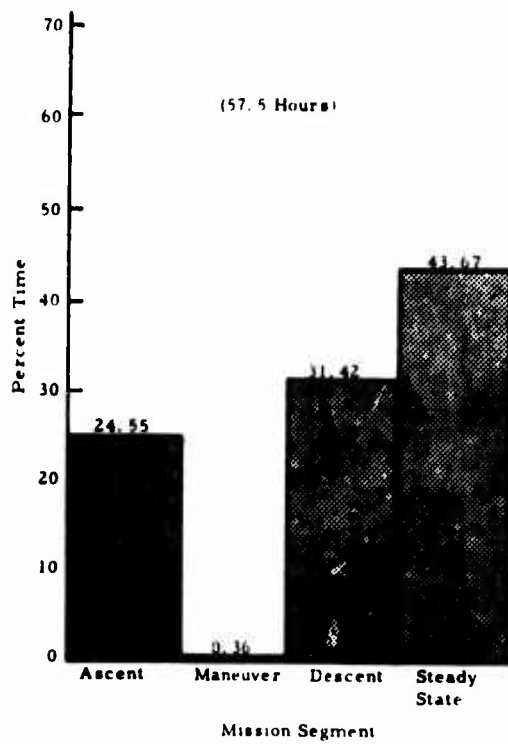


a) 21,000 to 23,000 lb

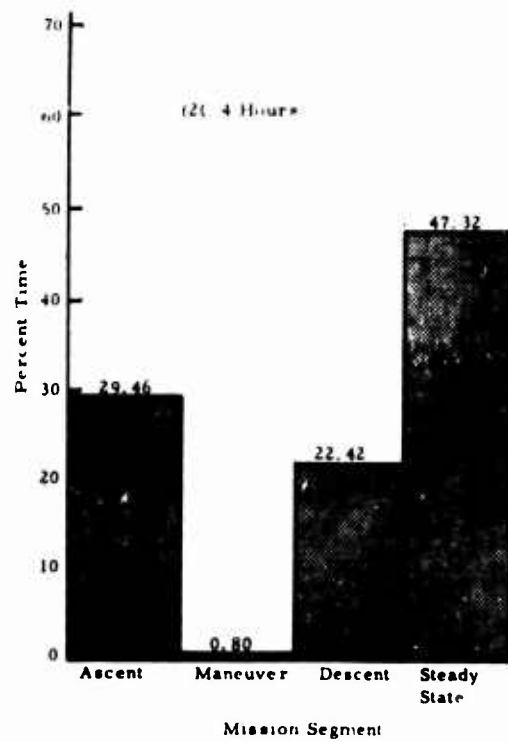


b) 23,000 to 25,000 lb

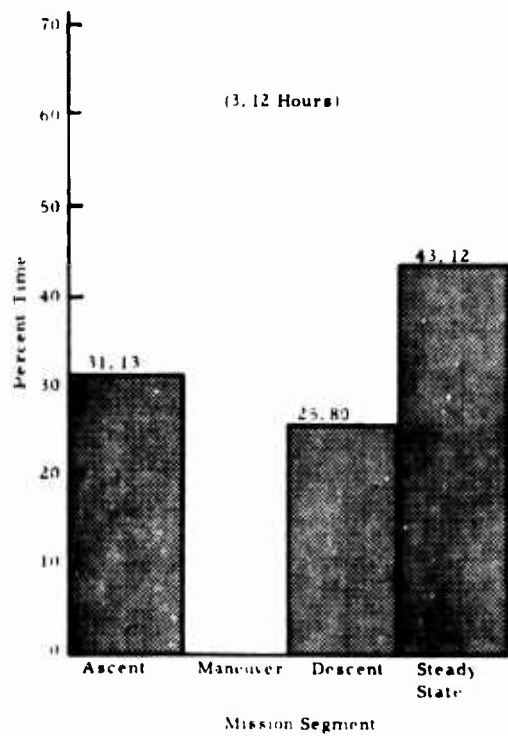
Figure 6. Flight Time in Each Gross Weight Range Broken Down by Percentage of Time in Each Mission Segment (Sample II).



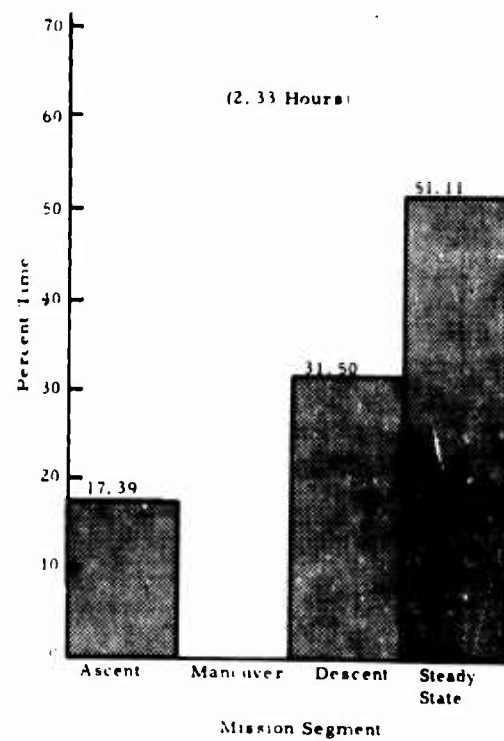
c) 25,000 to 27,000 lb



d) 27,000 to 29,000 lb

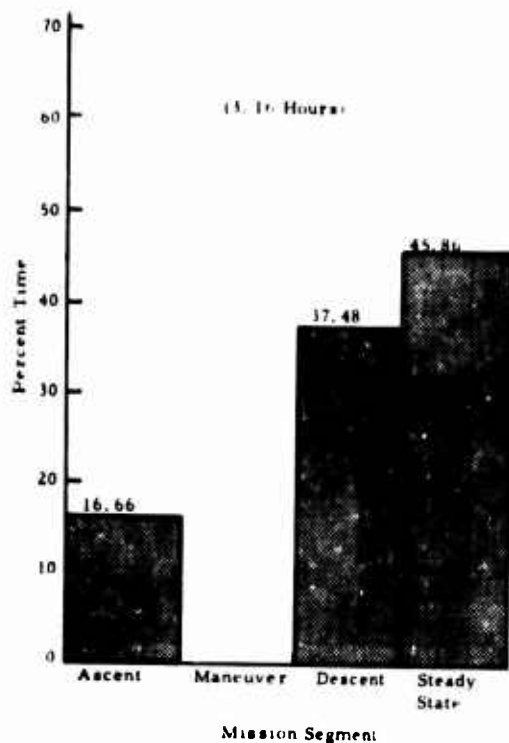


e) 29,000 to 31,000 lb

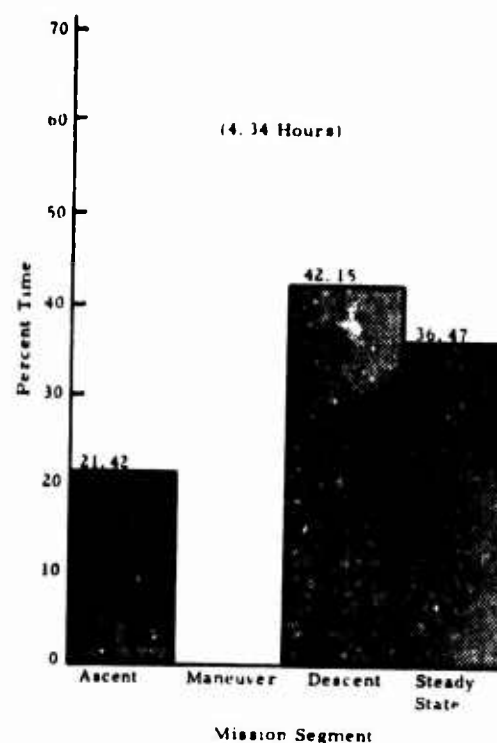


f) 31,000 to 33,000 lb

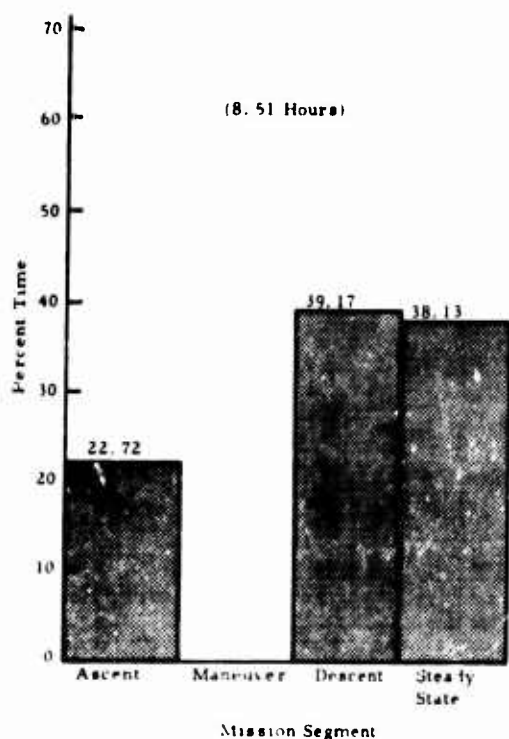
Figure 6 - Continued



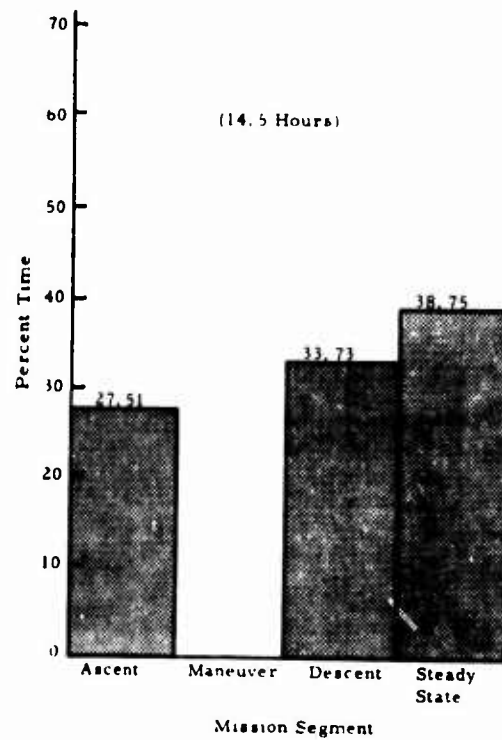
g) 33,000 to 35,000 lb



h) 35,000 to 36,000 lb



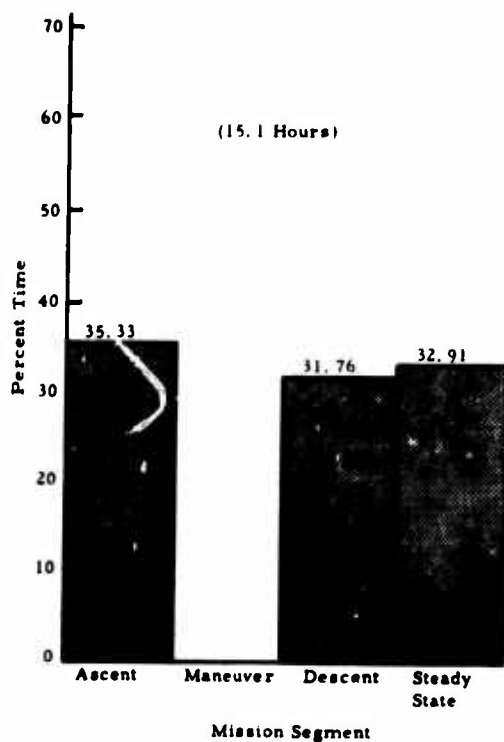
i) 36,000 to 37,000 lb



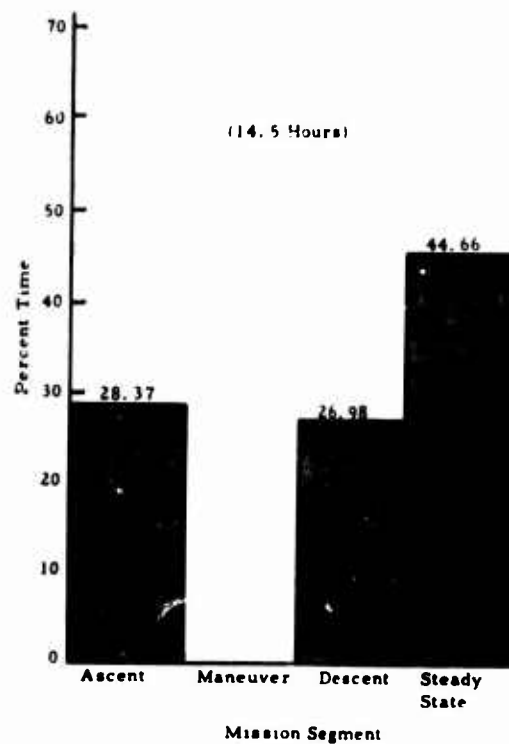
j) 37,000 to 38,000 lb

Figure 6 - Continued

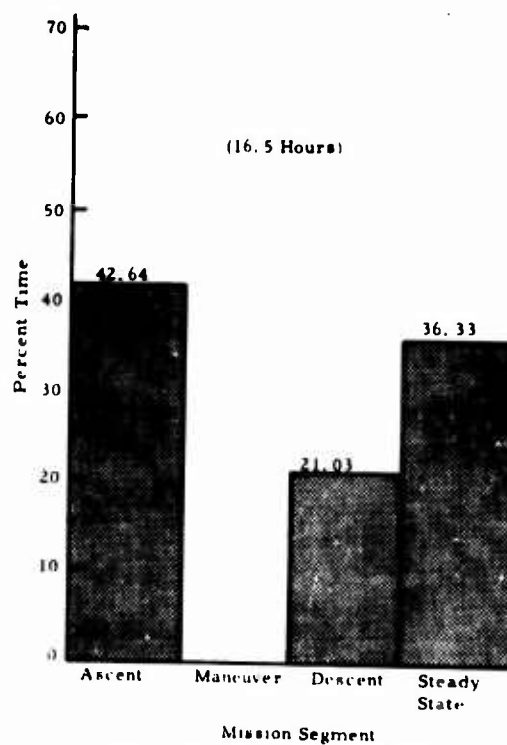




k) 38,000 to 39,000 lb

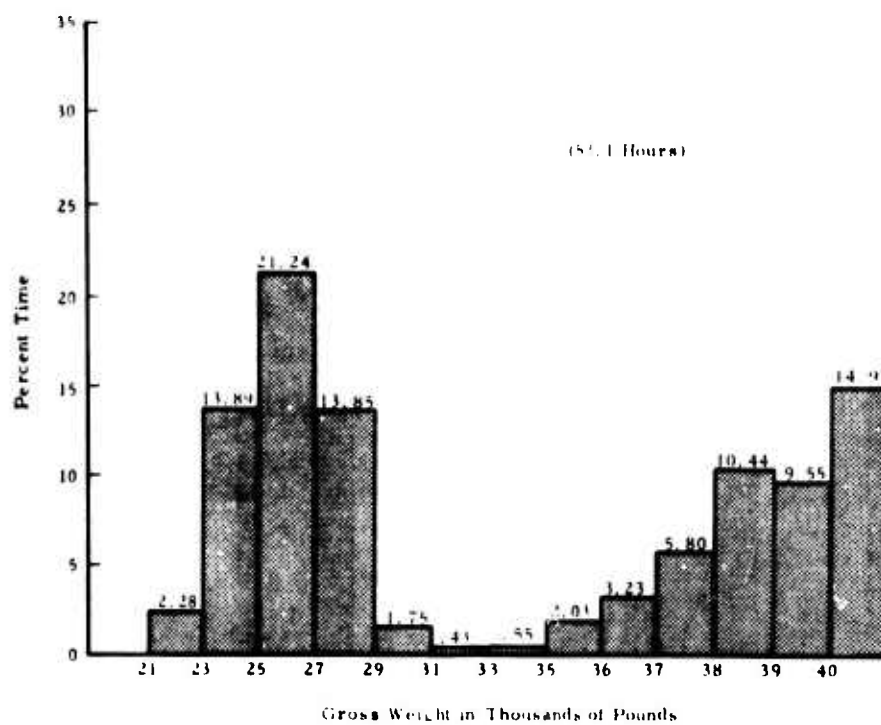


l) 39,000 to 40,000 lb

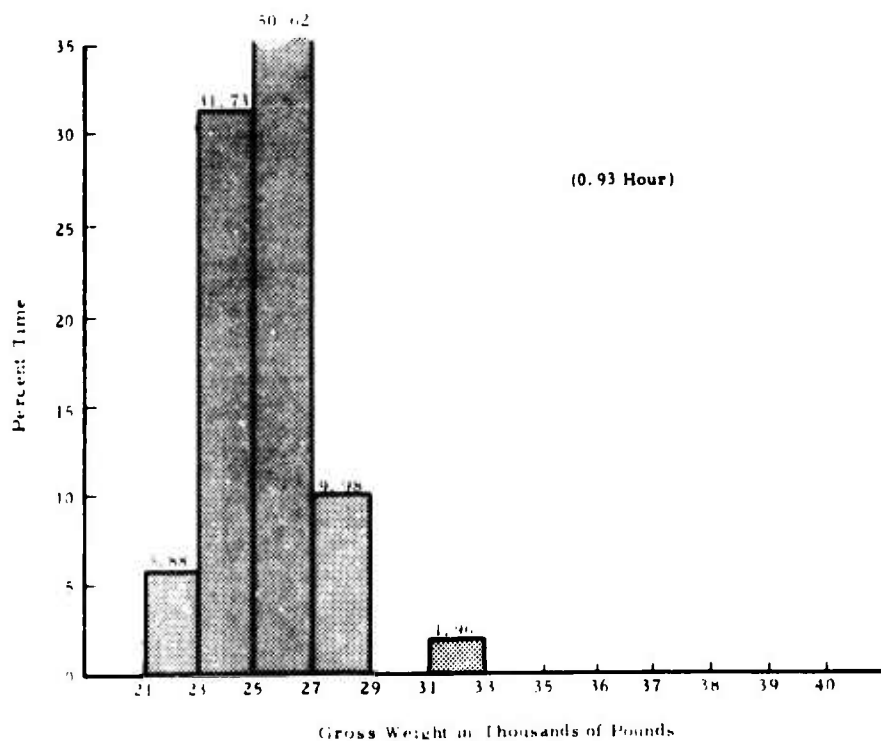


m) Above 40,000 lb

Figure 6 - Concluded

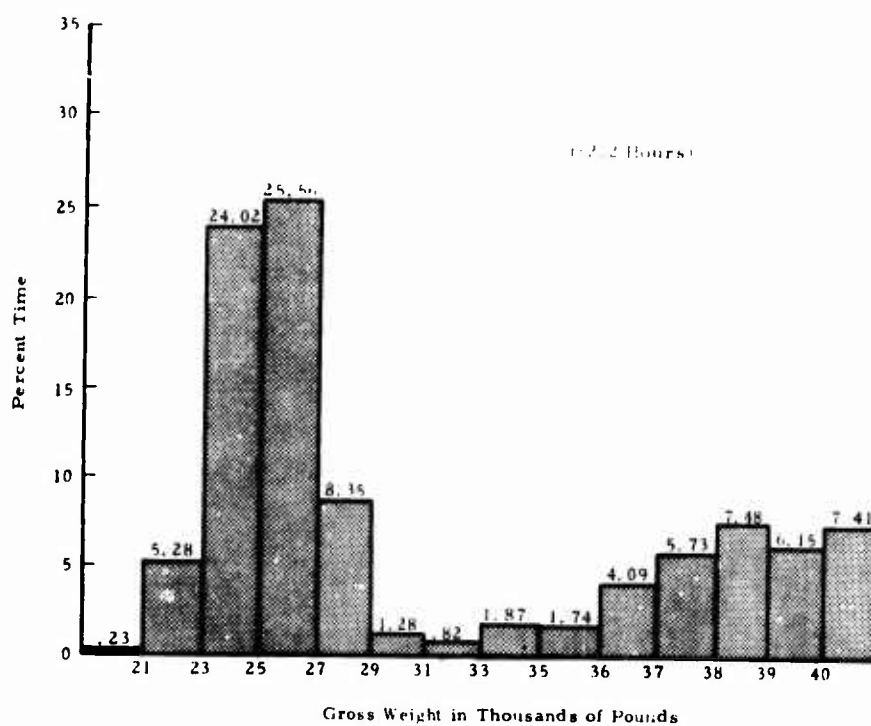


a) Ascent

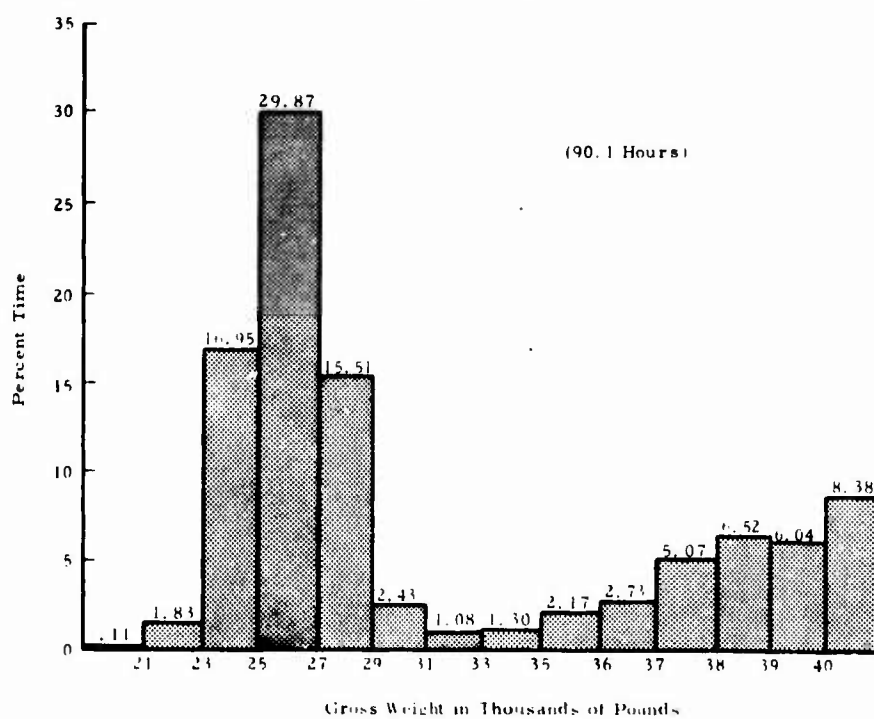


b) Maneuver

Figure 7. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Gross Weight Range (Sample I).

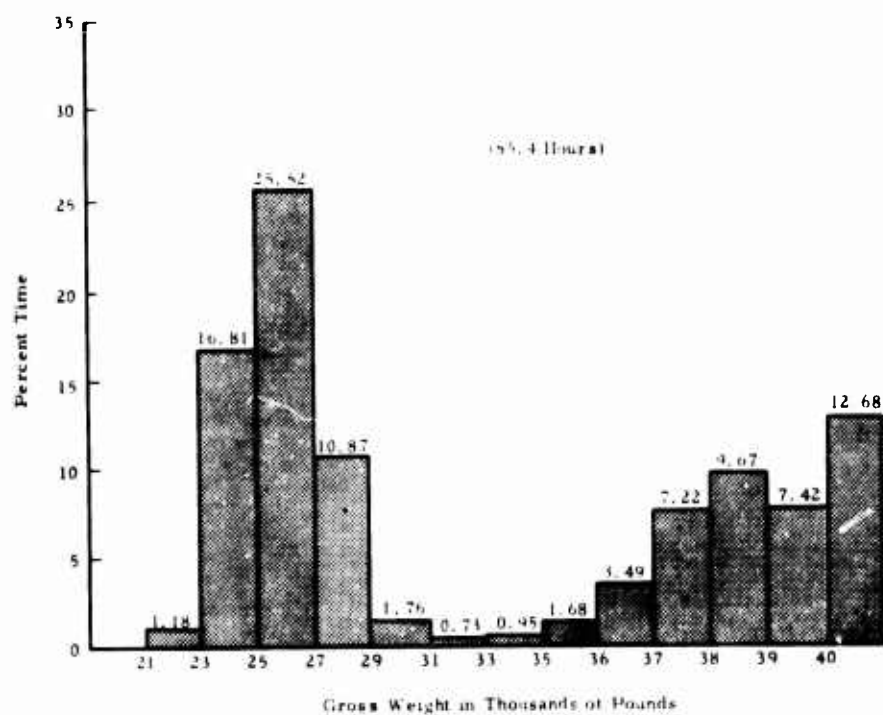


c) Descent

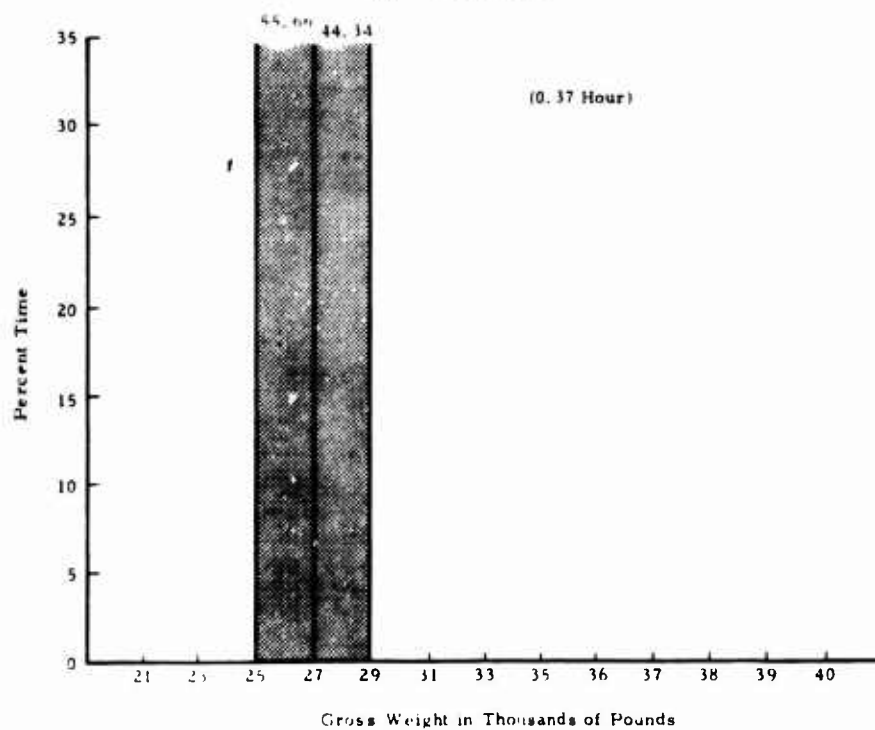


d) Steady State

Figure 7 - Concluded

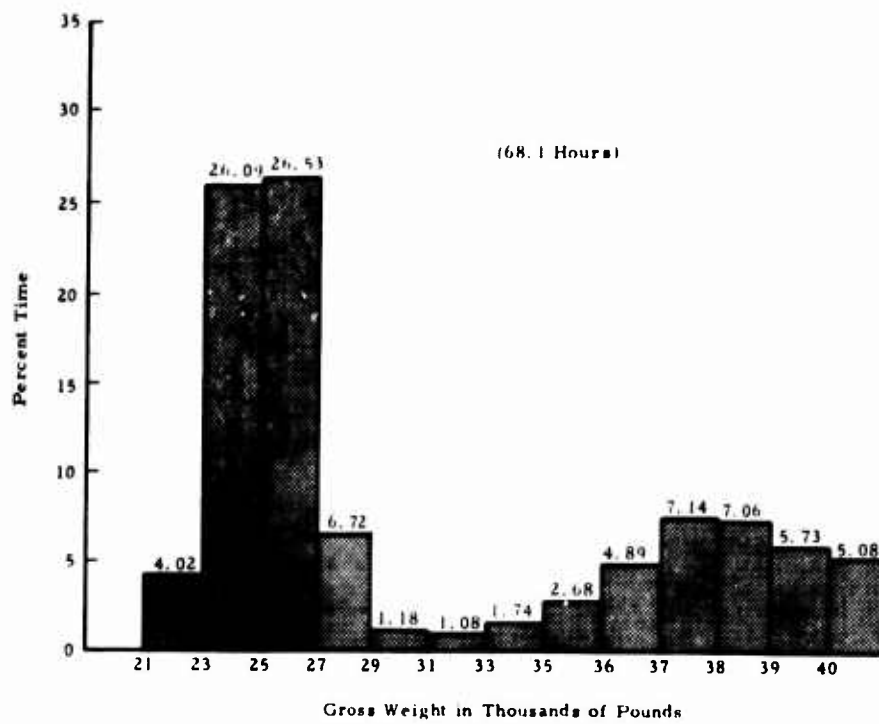


a) Ascent

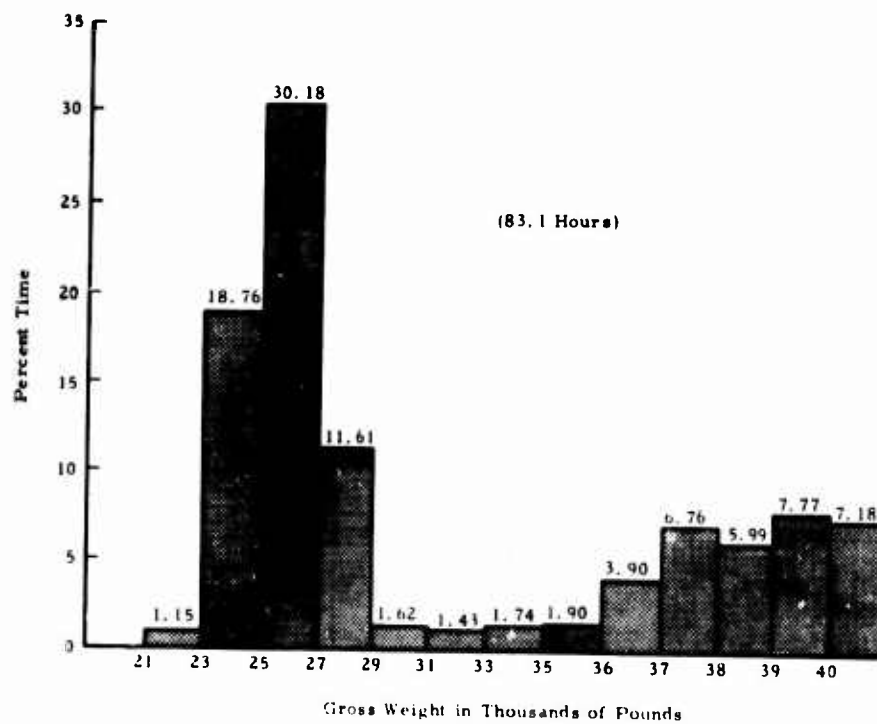


b) Maneuver

Figure 8. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Gross Weight Range (Sample II).



c) Descent



d) Steady State

Figure 8 - Concluded

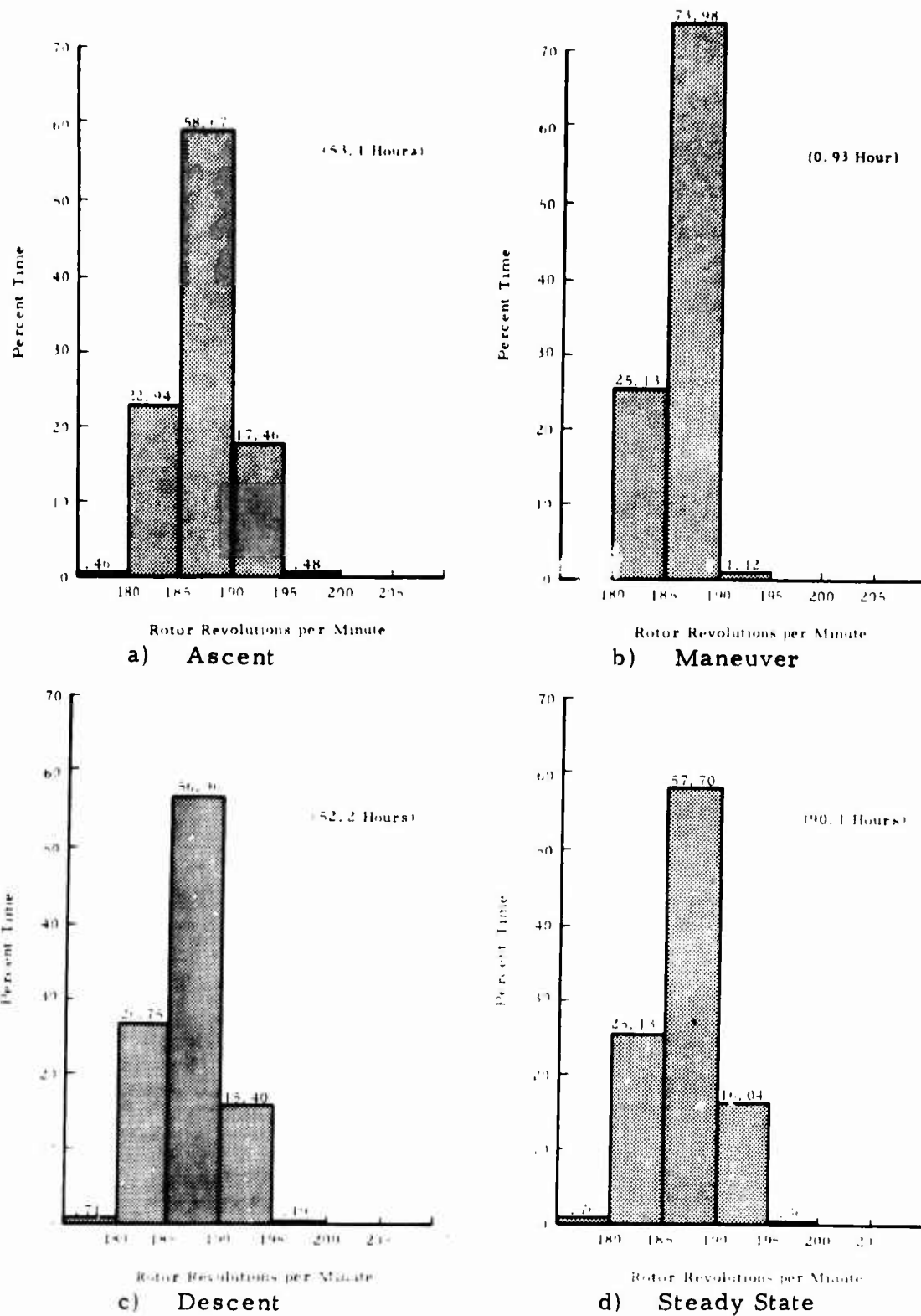
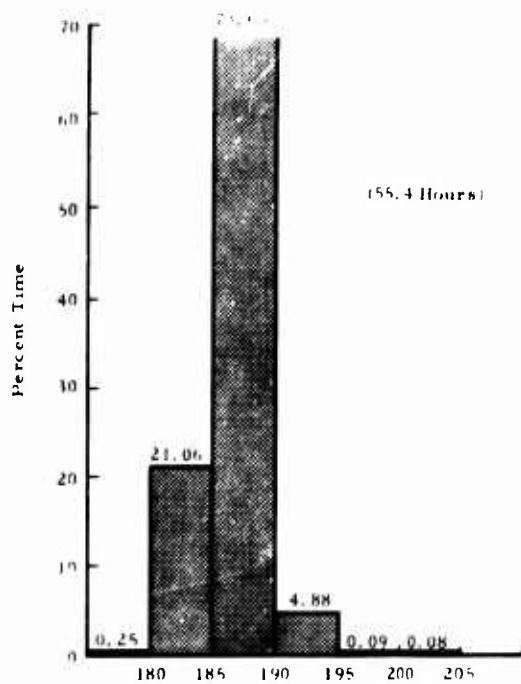
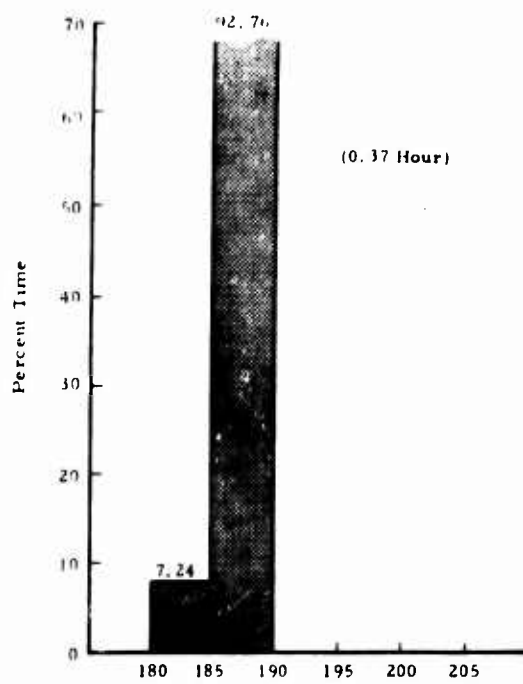


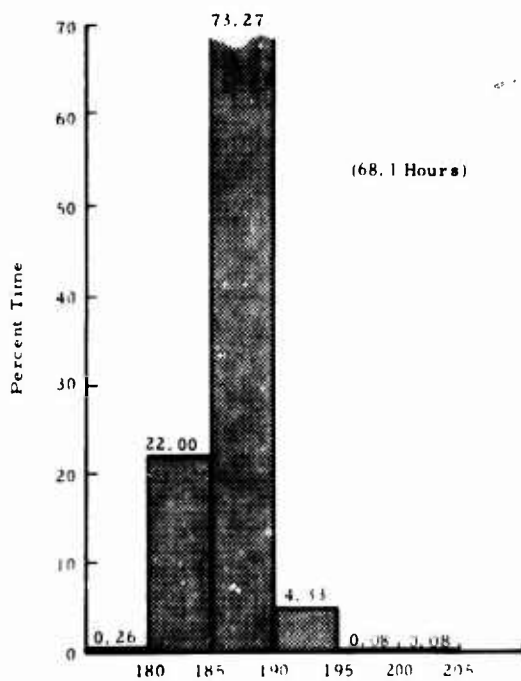
Figure 9. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Rotor RPM Range (Sample I).



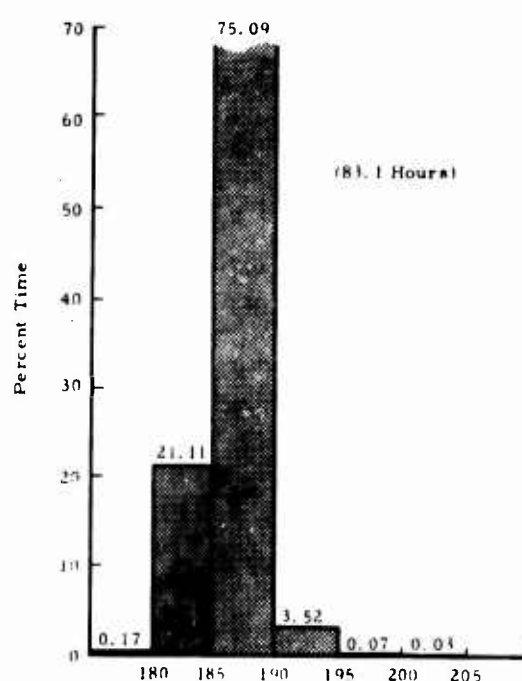
a) Ascent



b) Maneuver

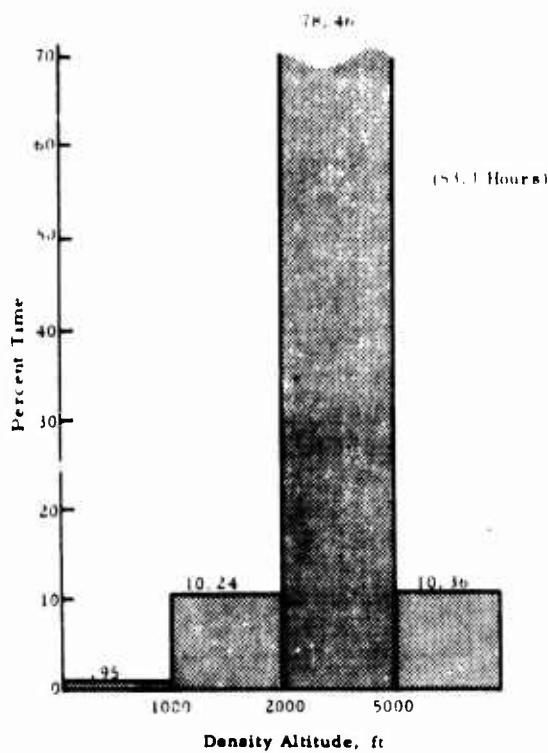


c) Descent

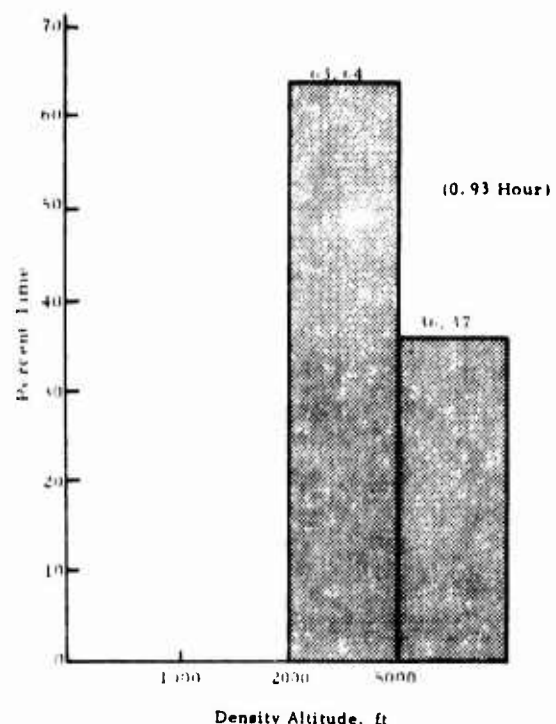


d) Steady State

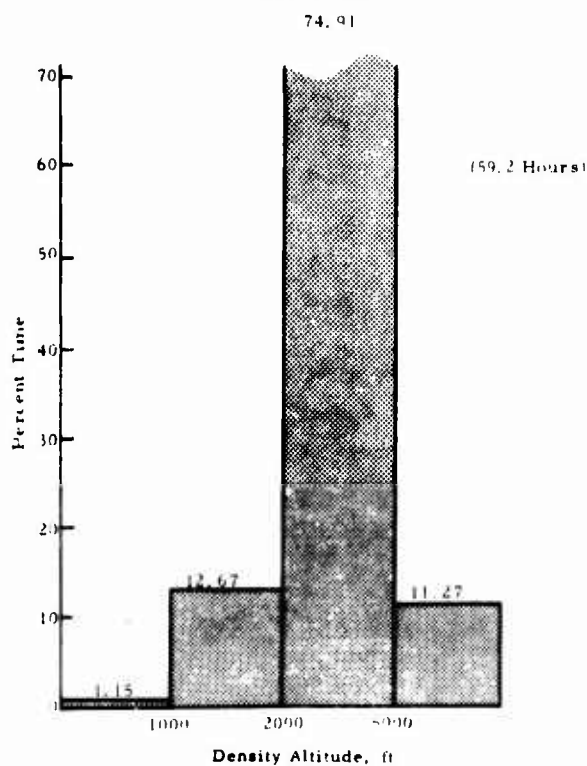
Figure 10. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Rotor RPM Range (Sample II).



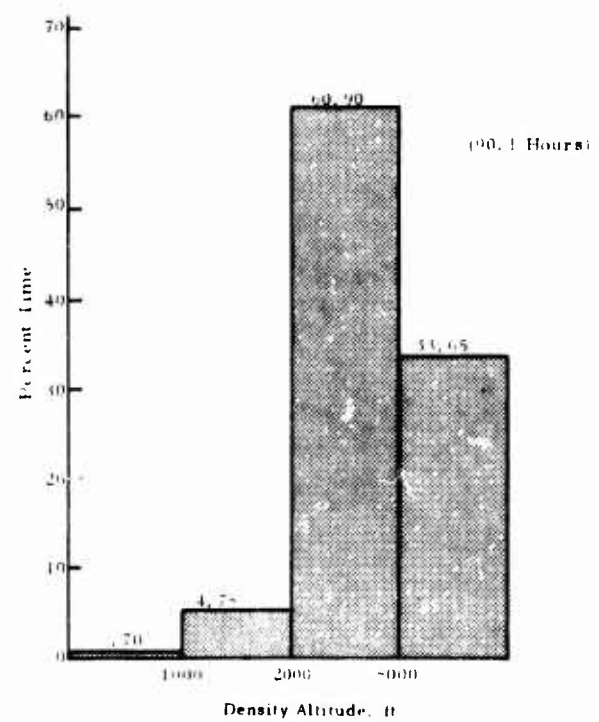
a) Ascent



b) Maneuver



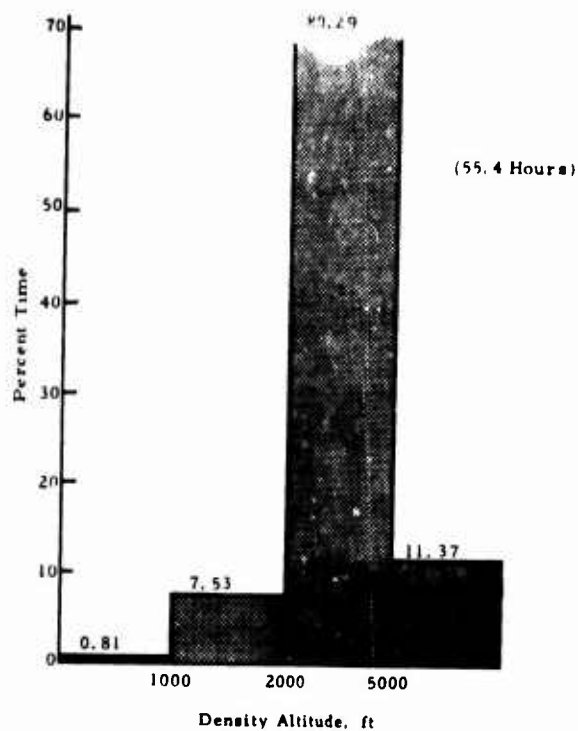
c) Descent



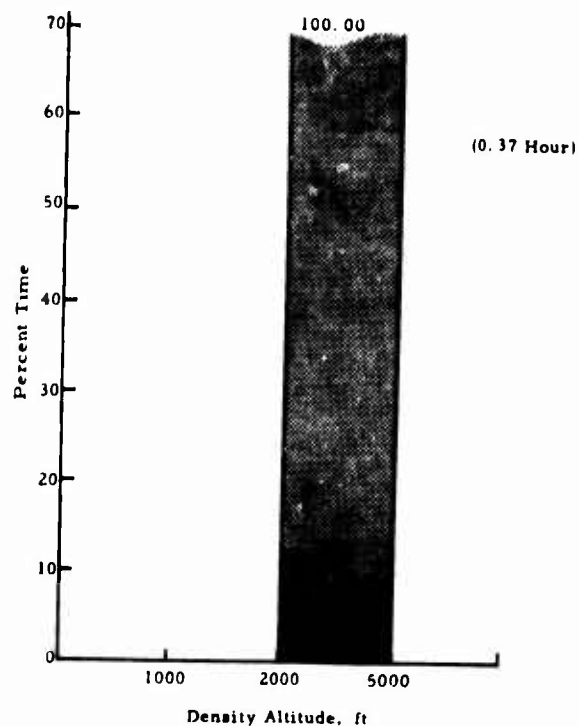
d) Steady State

Figure 11. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Altitude Range (Sample I).

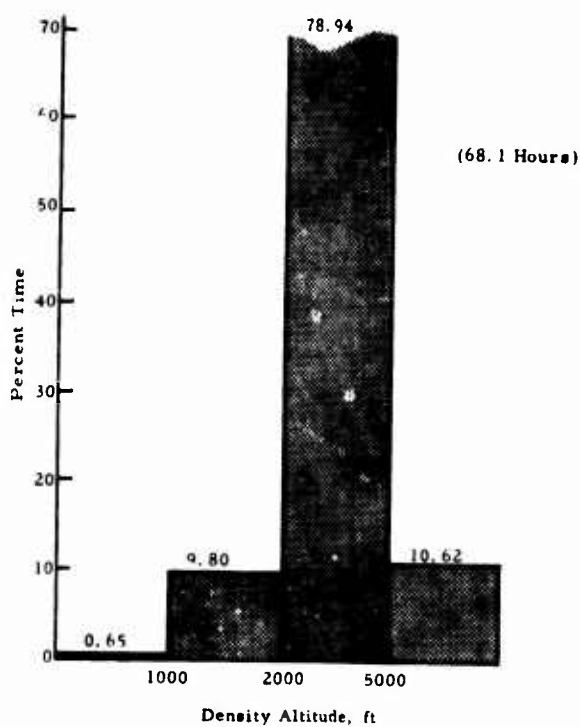




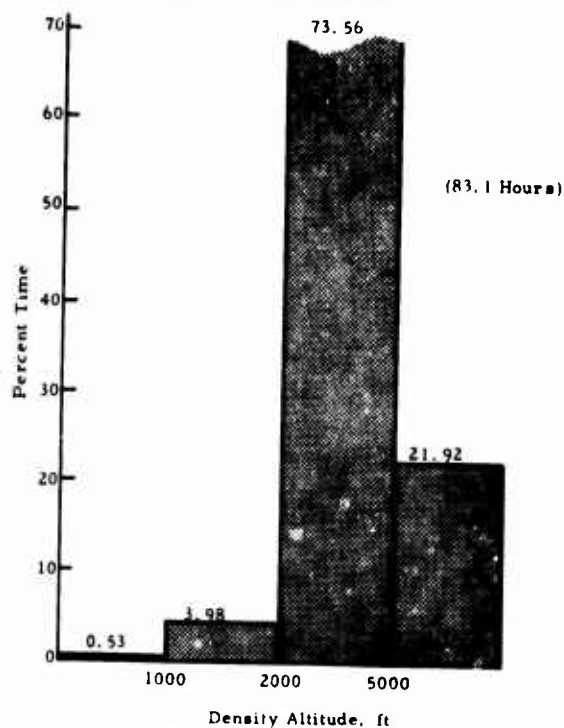
a) Ascent



b) Maneuver



c) Descent



d) Steady State

Figure 12. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Altitude Range (Sample II).

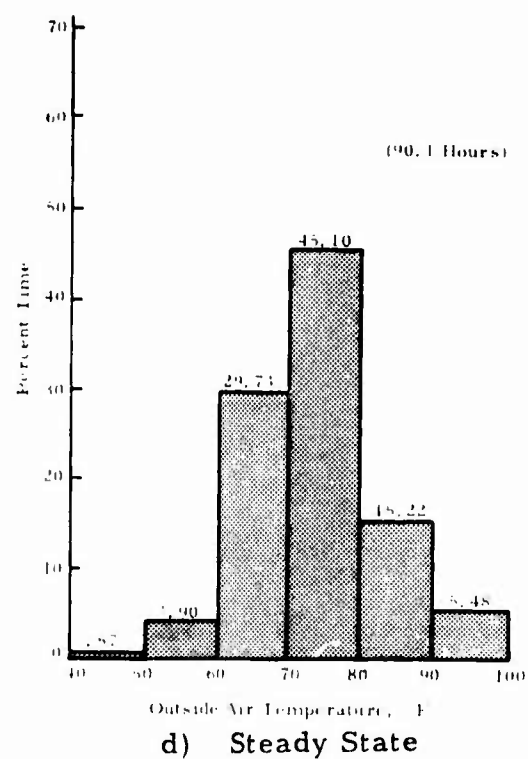
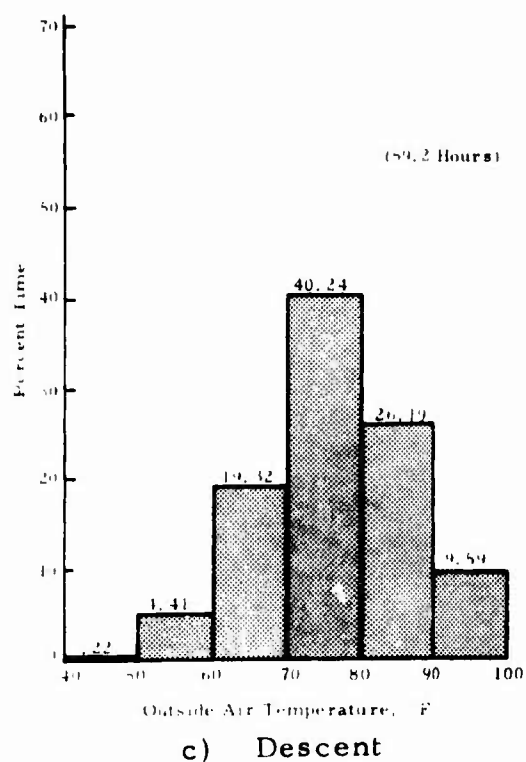
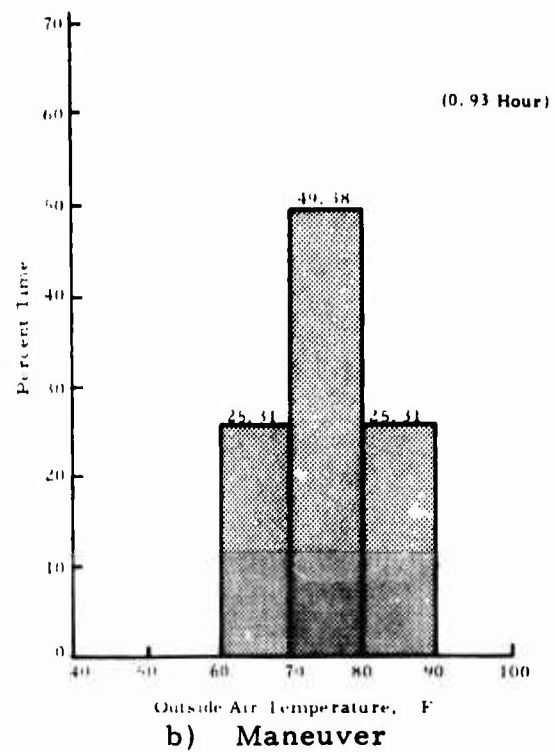
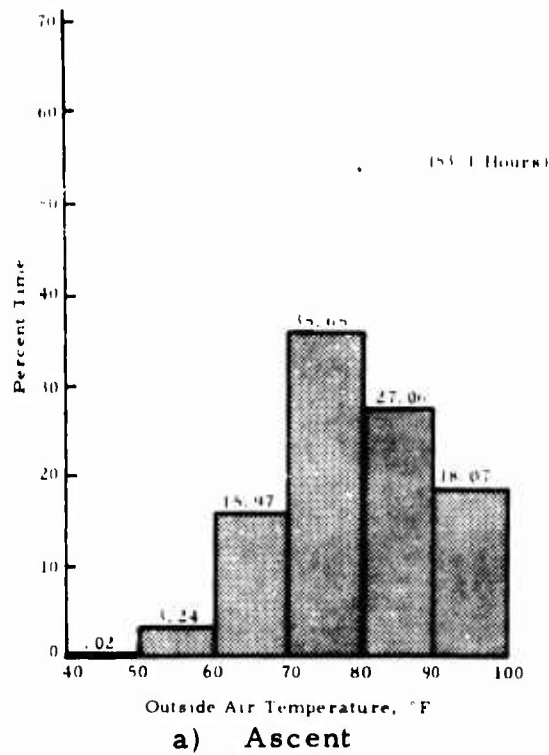
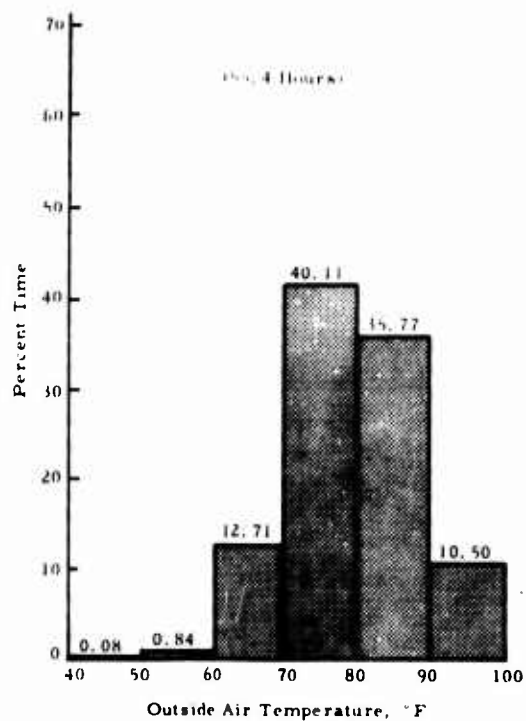
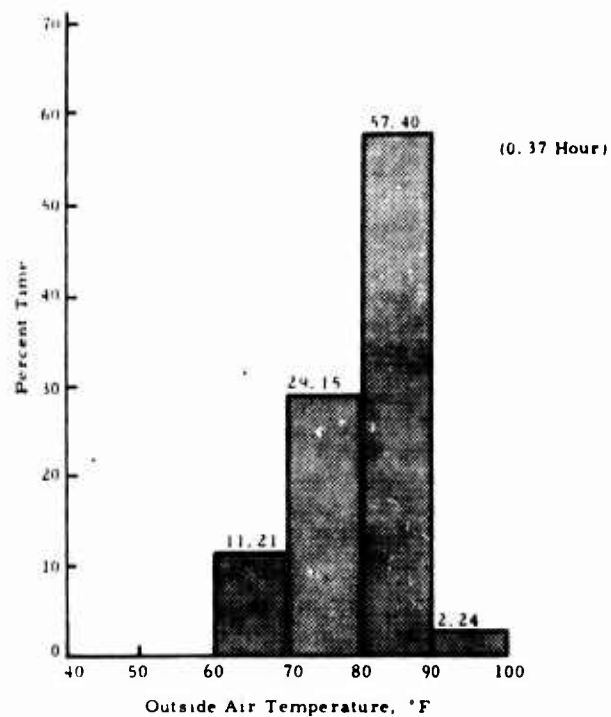


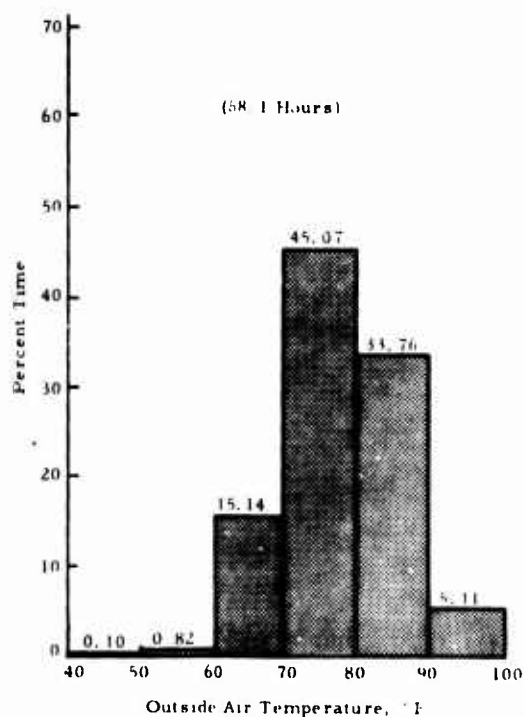
Figure 13. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Outside Air Temperature Range (Sample I).



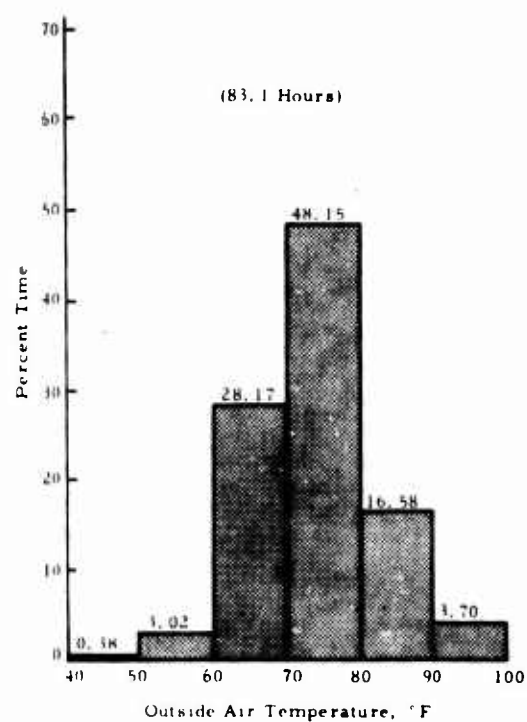
a) Ascent



b) Maneuver

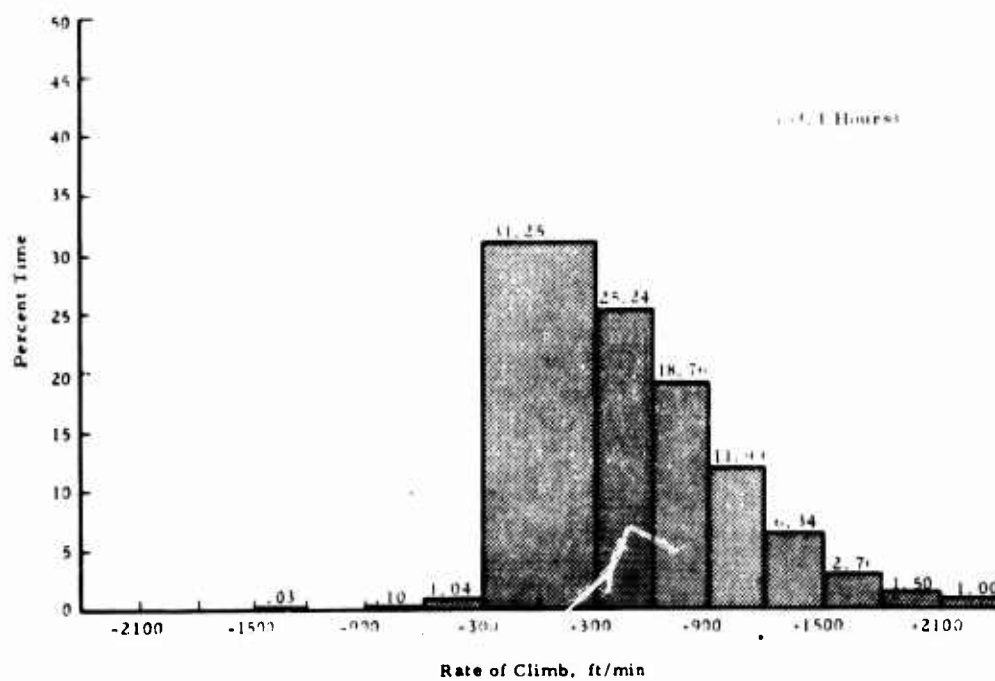


c) Descent

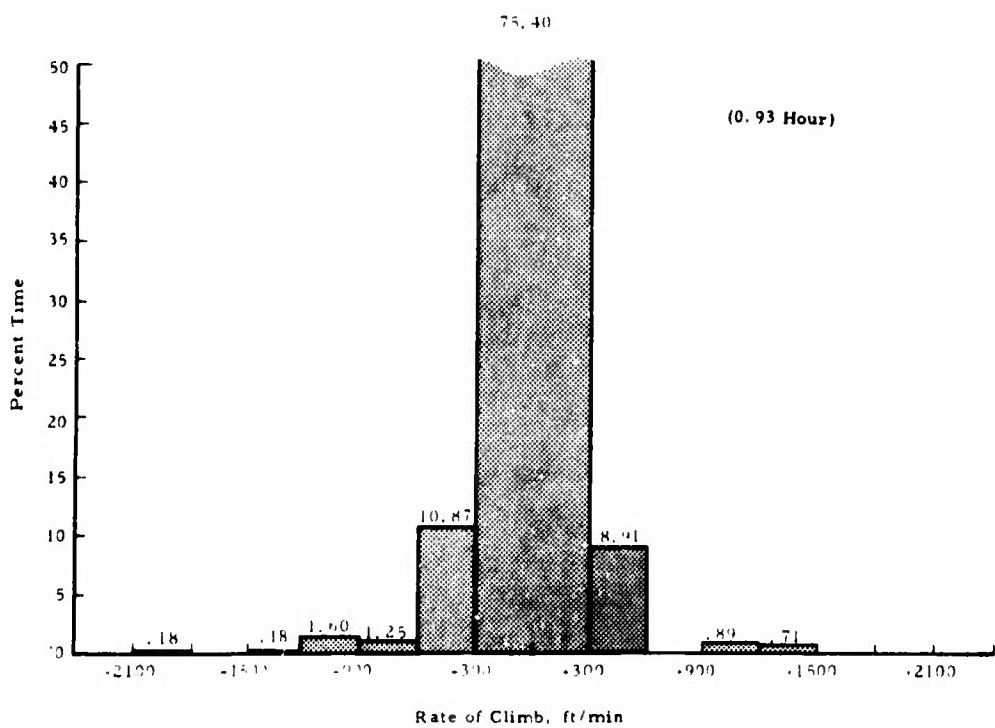


d) Steady State

Figure 14. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Outside Air Temperature Range (Sample II).

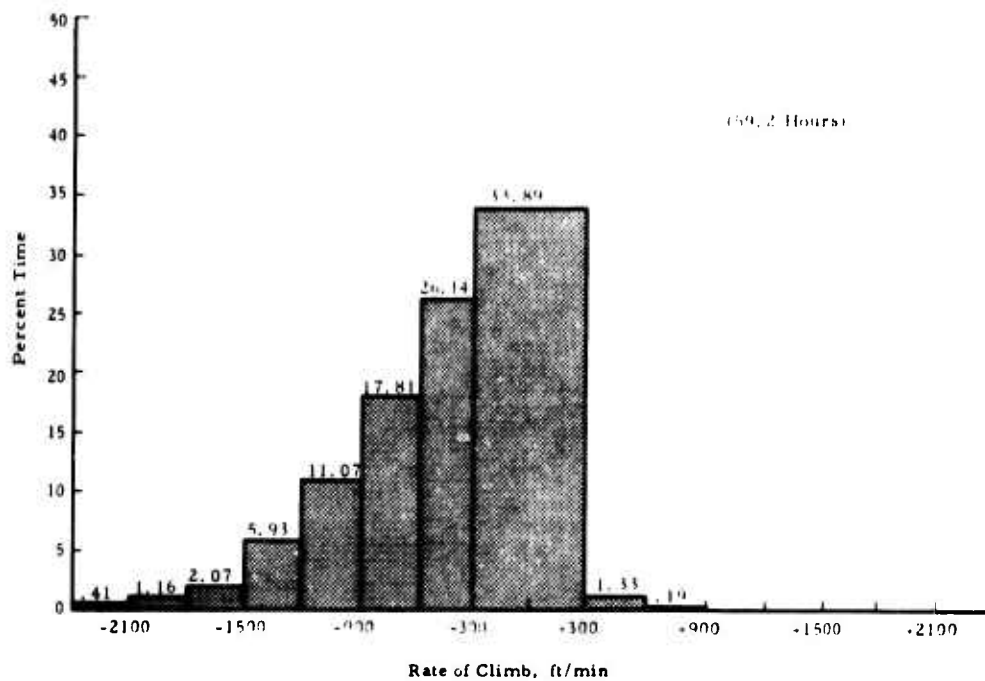


a) Ascent

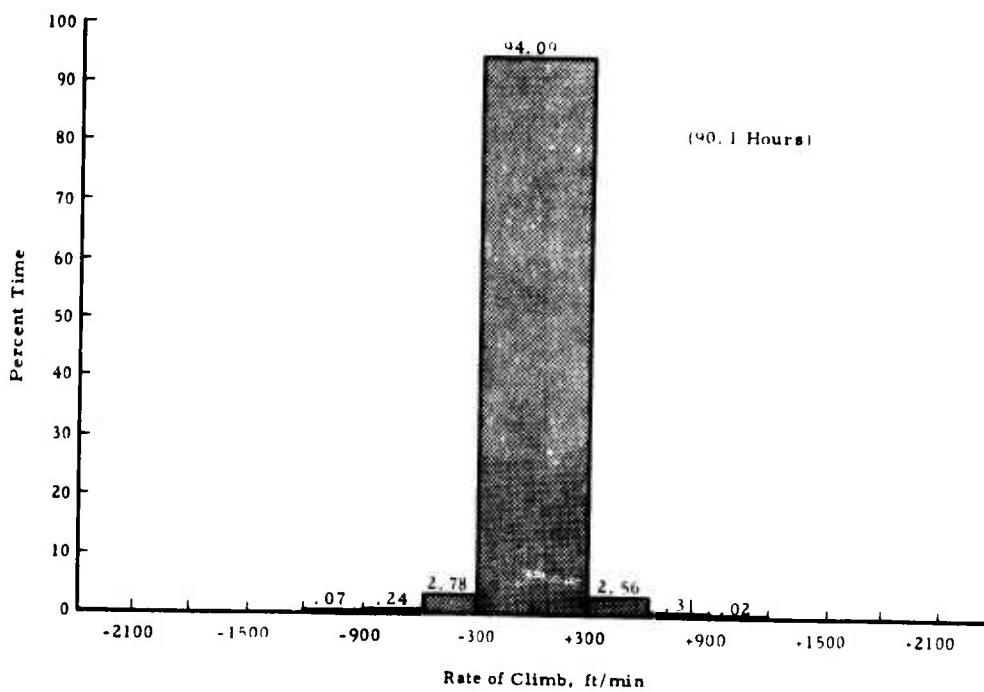


b) Maneuver

Figure 15. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Rate-of-Climb Range (Sample I).



c) Descent



d) Steady State

Figure 15 - Concluded

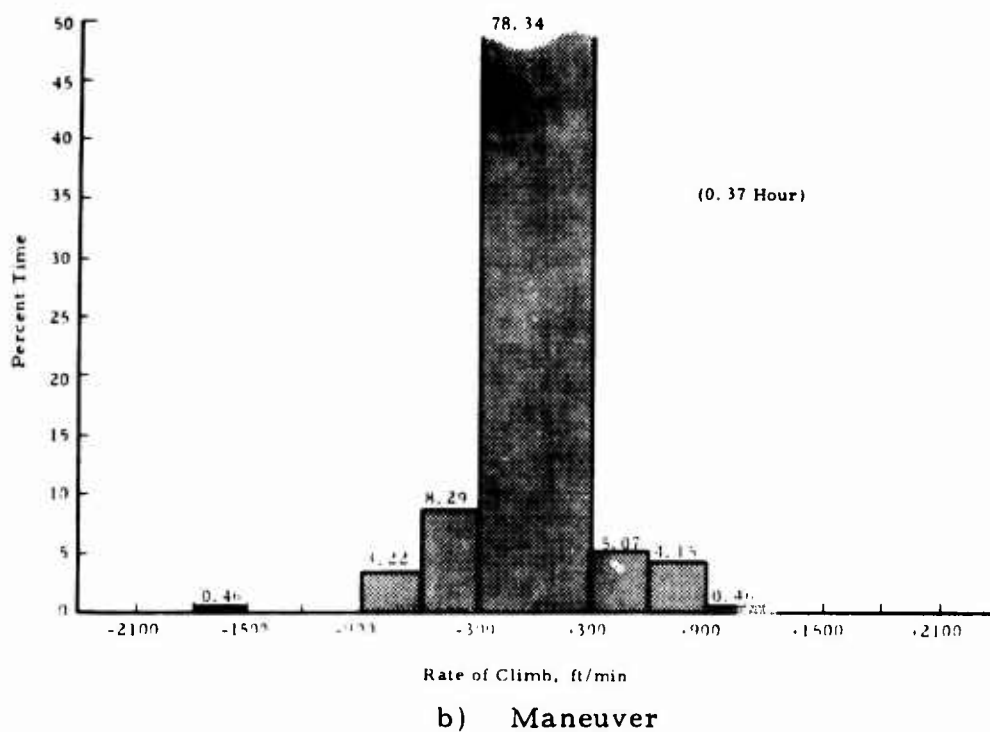
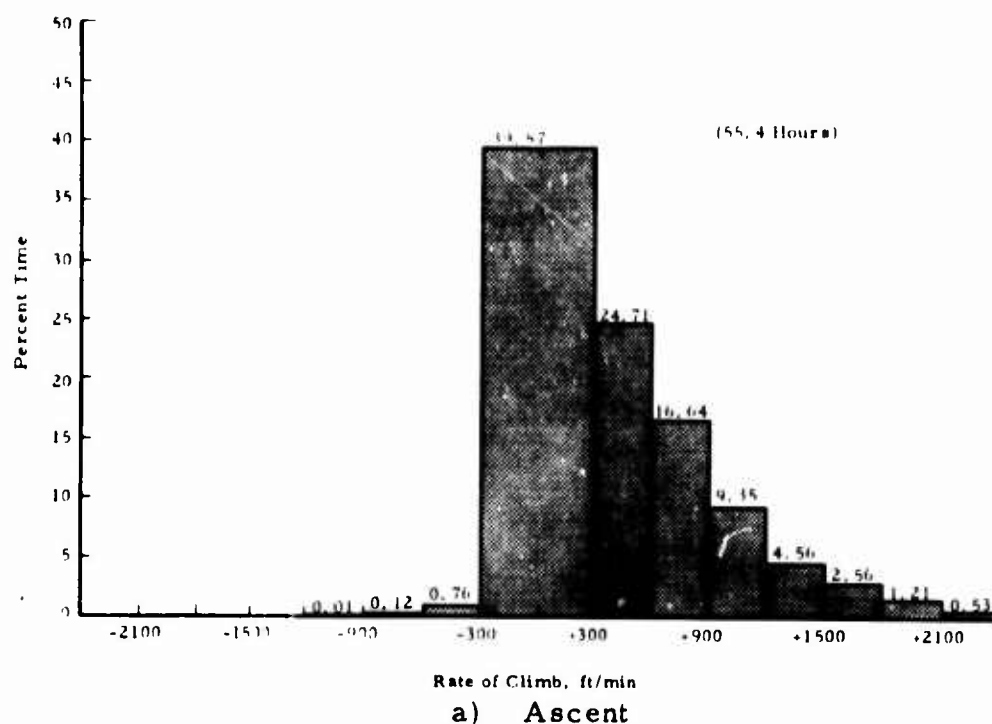
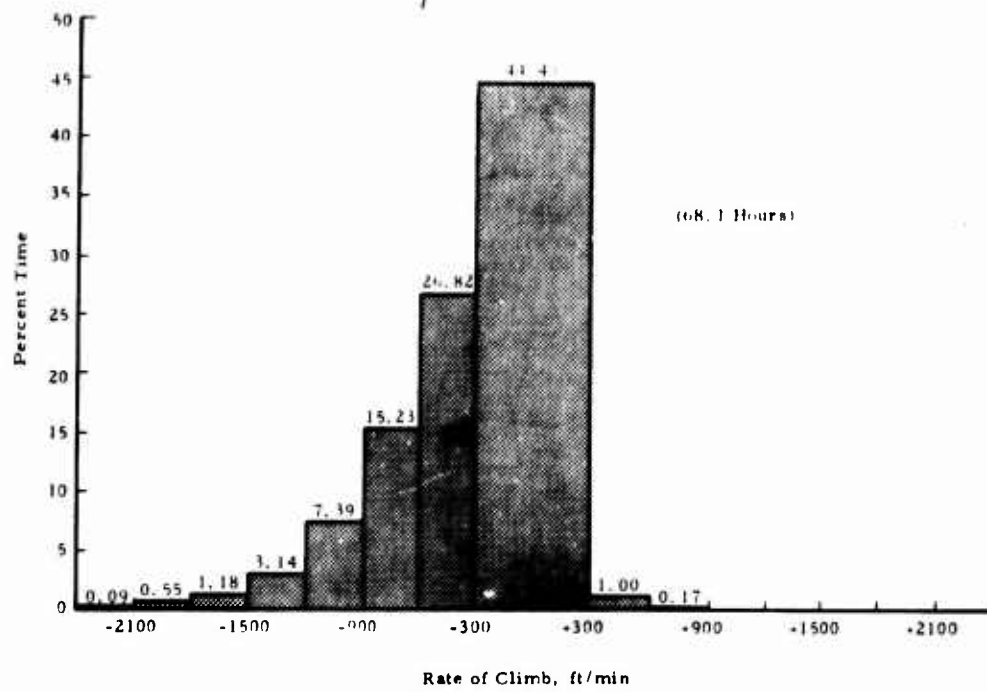
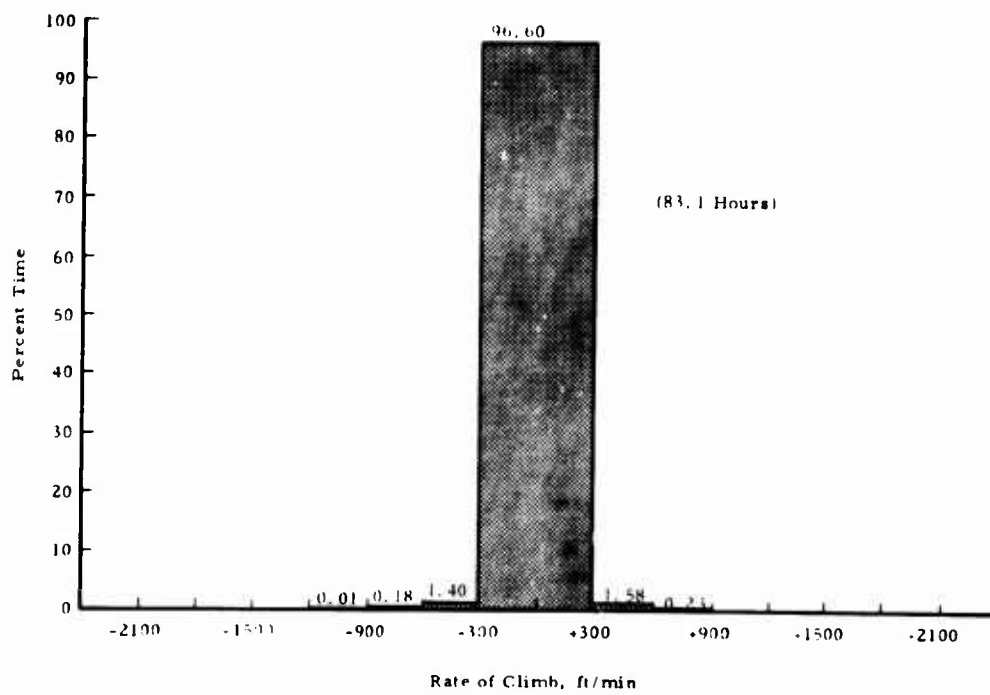


Figure 16. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Rate-of-Climb Range (Sample II).

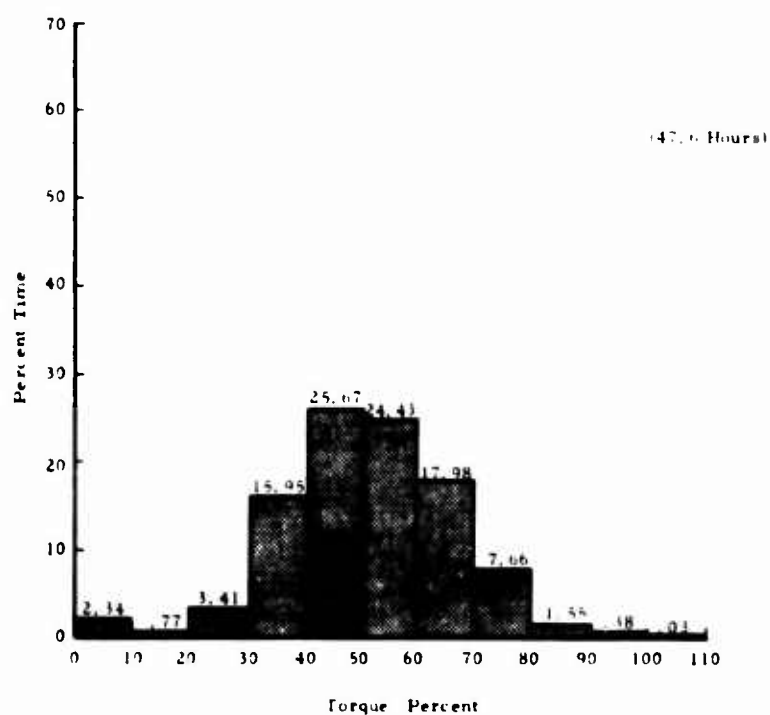


c) Descent

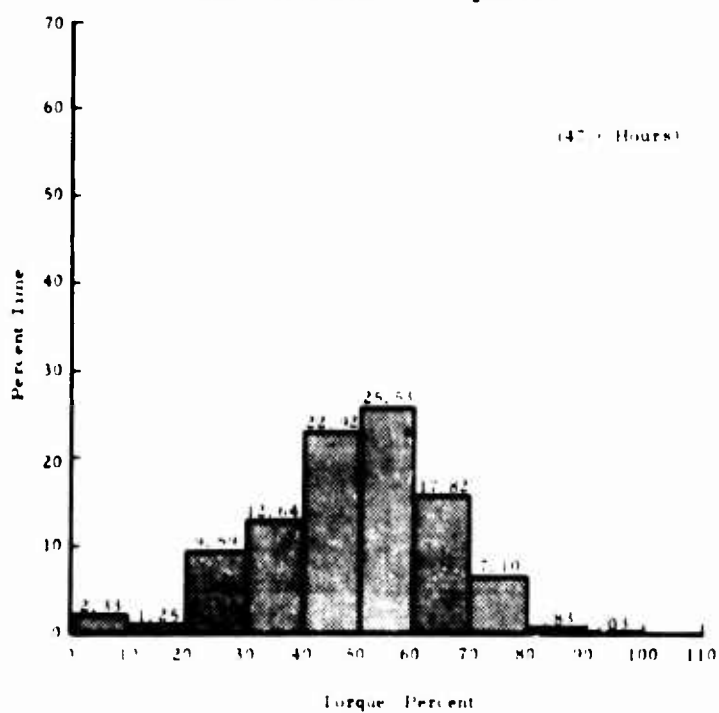


d) Steady State

Figure 16 - Concluded



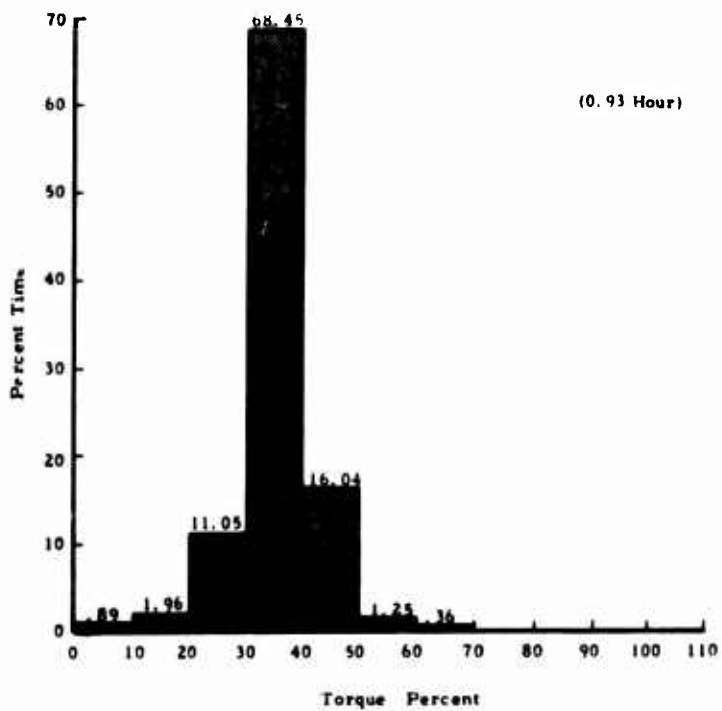
a) Ascent (Torque 1)



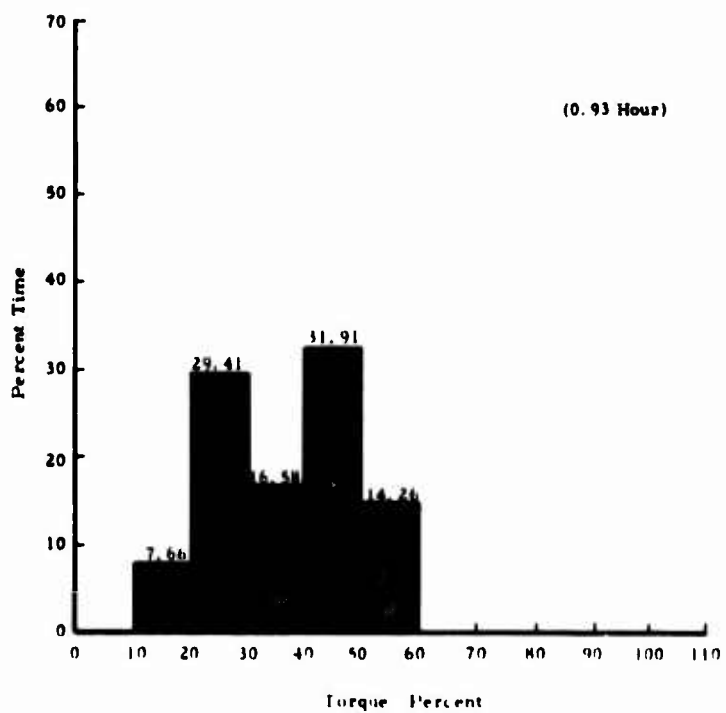
b) Ascent (Torque 2)

Figure 17. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Engine Torque Range (Sample I).



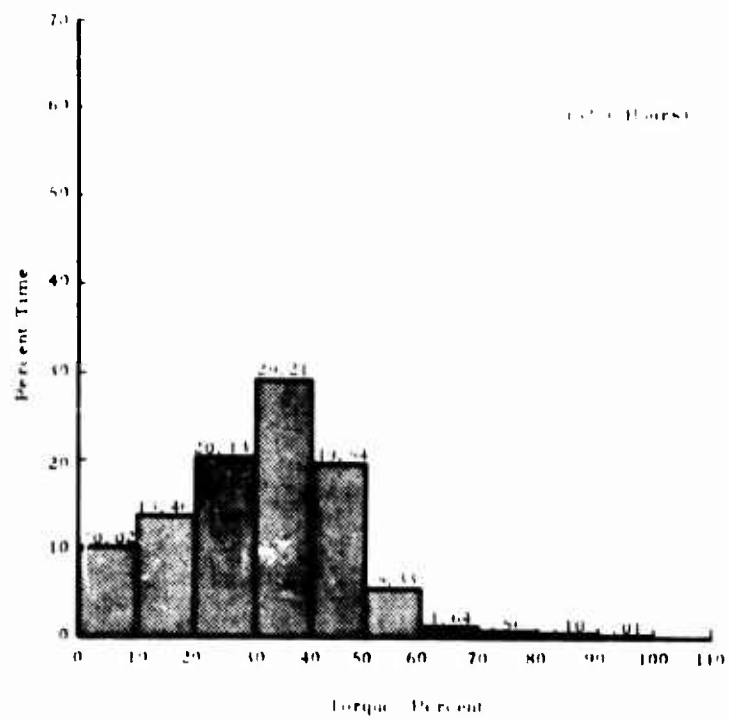


c) Maneuver (Torque 1)

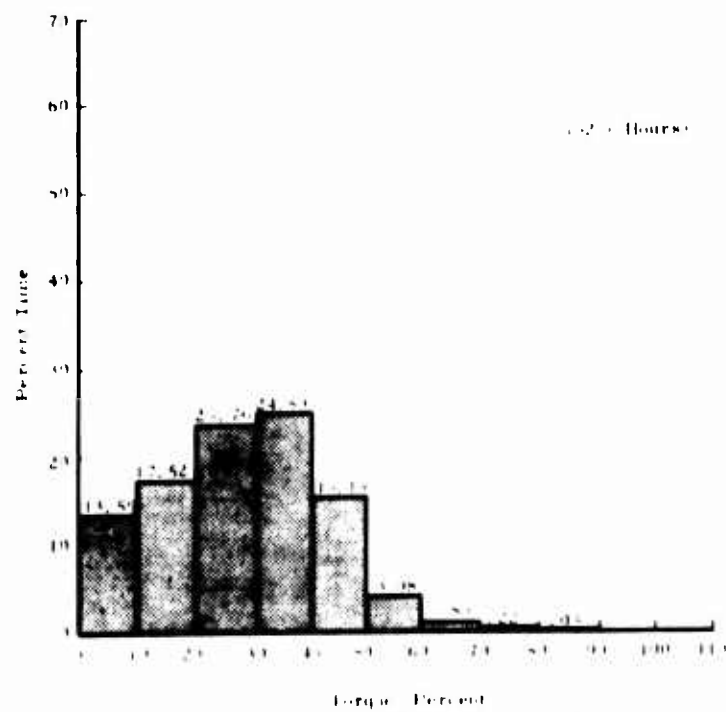


d) Maneuver (Torque 2)

Figure 17 - Continued

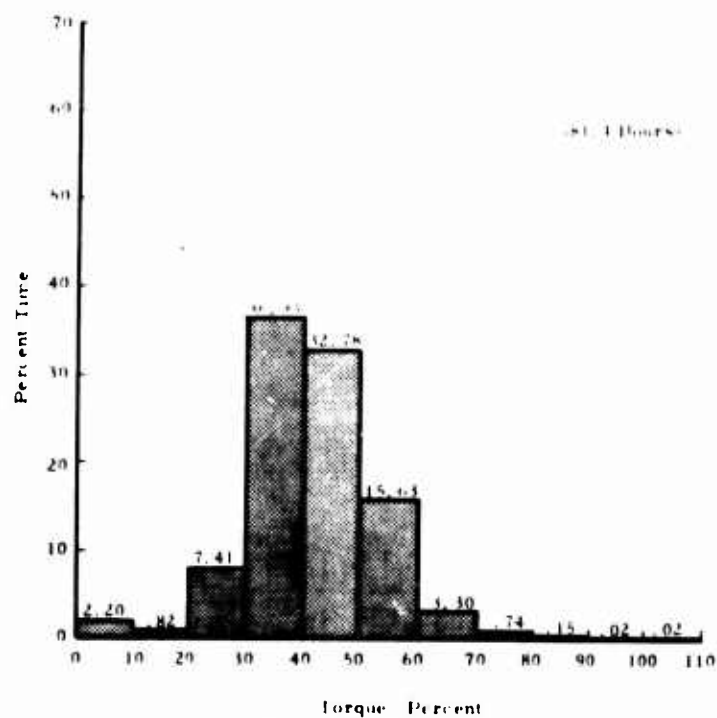


e) Descent (Torque 1)

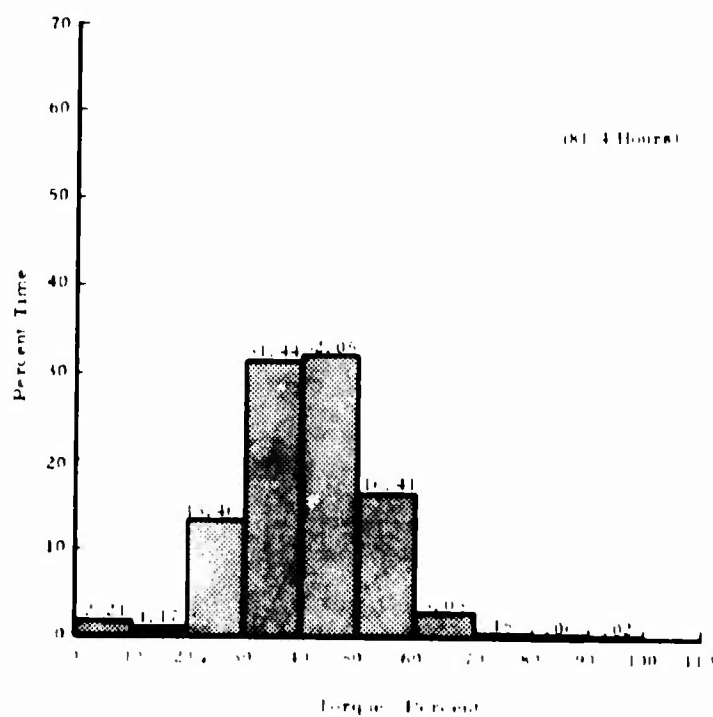


f) Descent (Torque 2)

Figure 17 - Continued

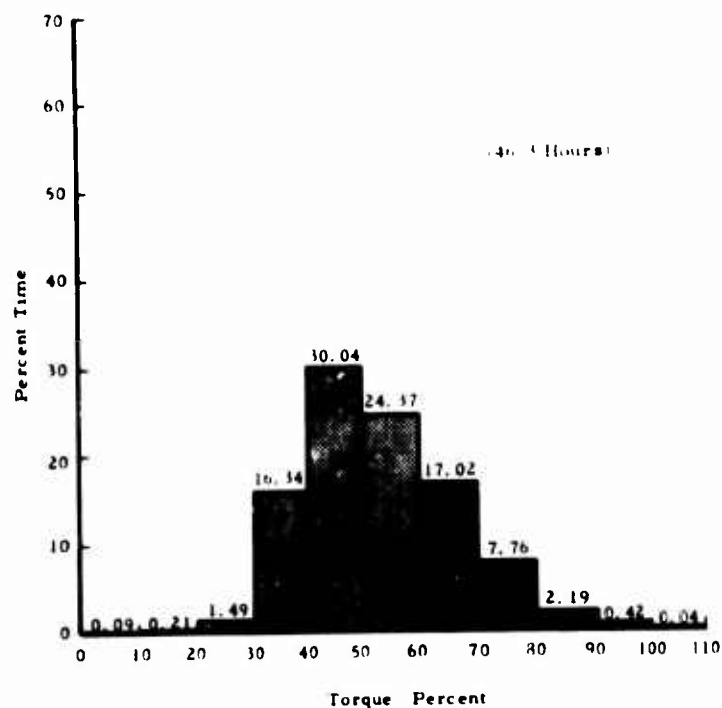


g) Steady State (Torque 1)

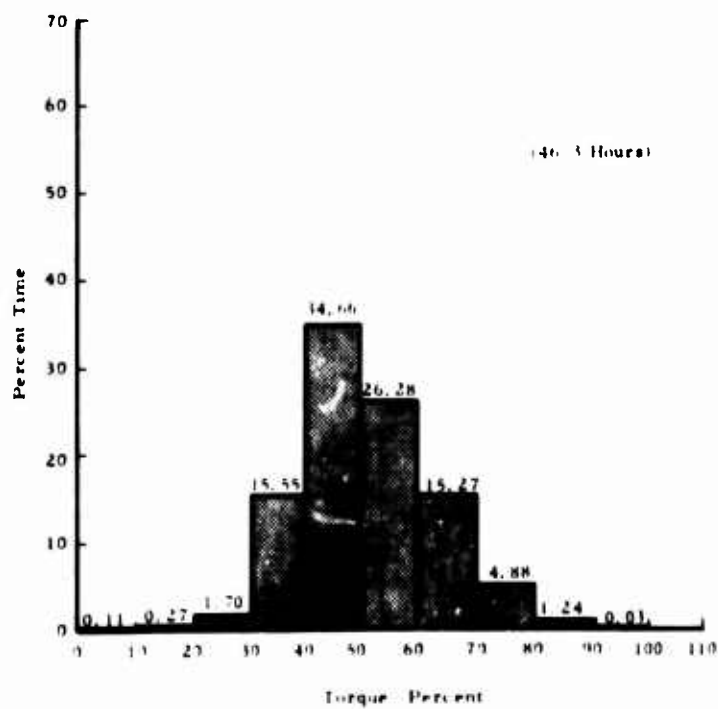


h) Steady State (Torque 2)

Figure 17 - Concluded

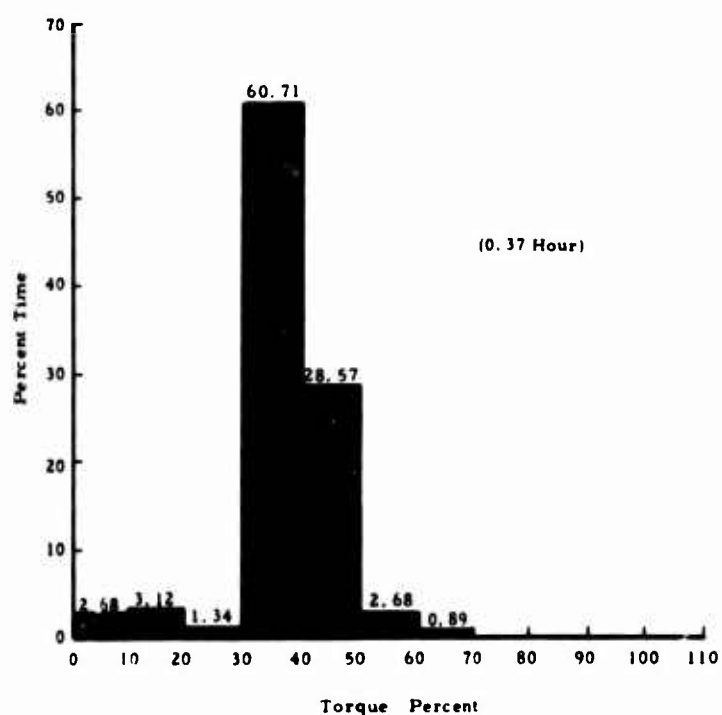


a) Ascent (Torque 1)

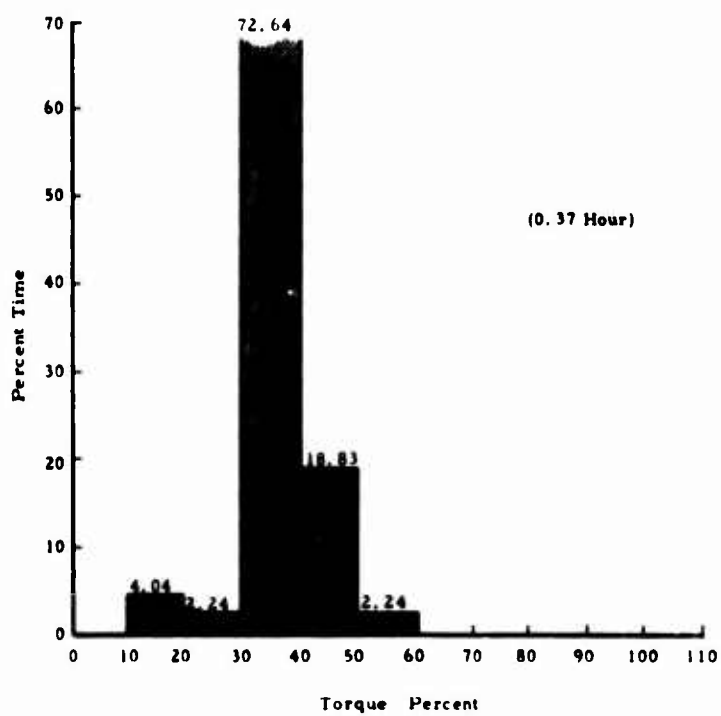


b) Ascent (Torque 2)

Figure 18. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Engine Torque Range (Sample II).

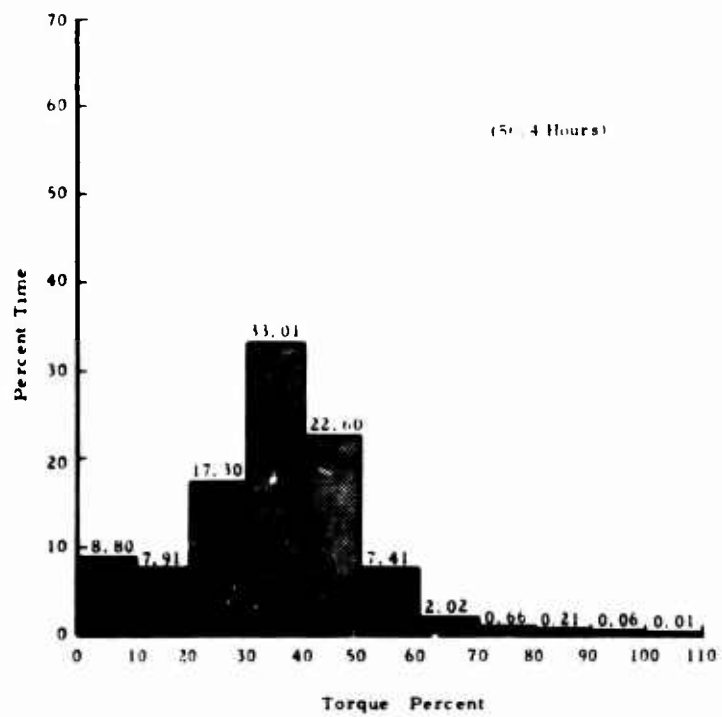


c) Maneuver (Torque 1)

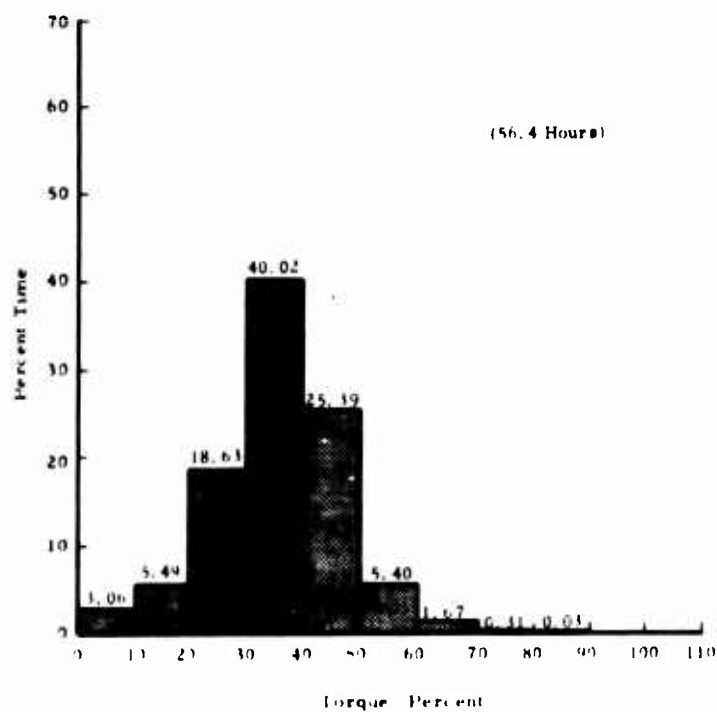


d) Maneuver (Torque 2)

Figure 18 - Continued

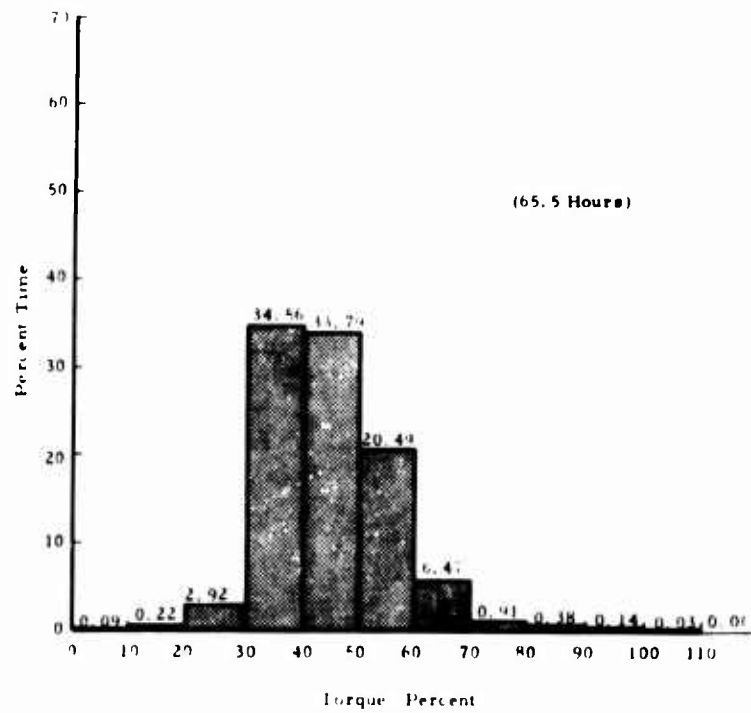


e) Descent (Torque 1)

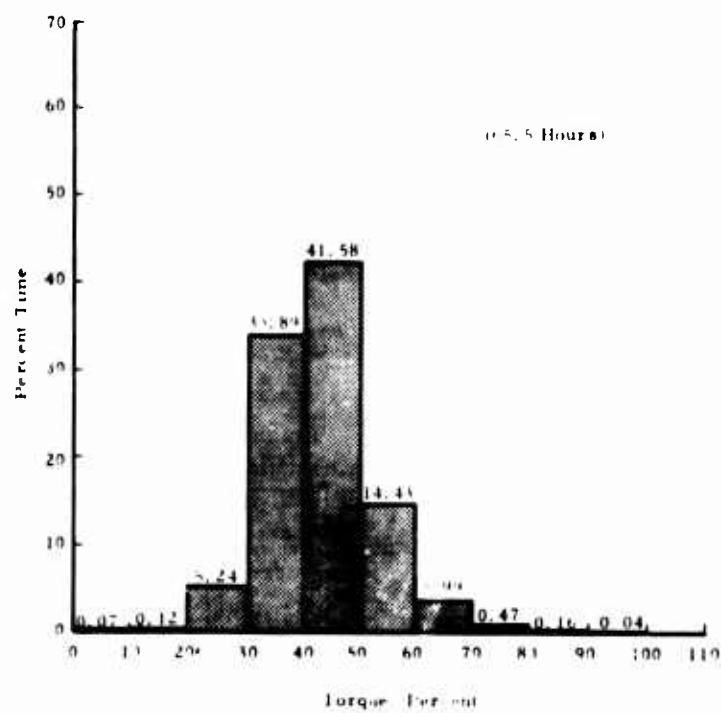


f) Descent (Torque 2)

Figure 18 - Continued



g) Steady State (Torque 1)



h) Steady State (Torque 2)

Figure 18 - Concluded

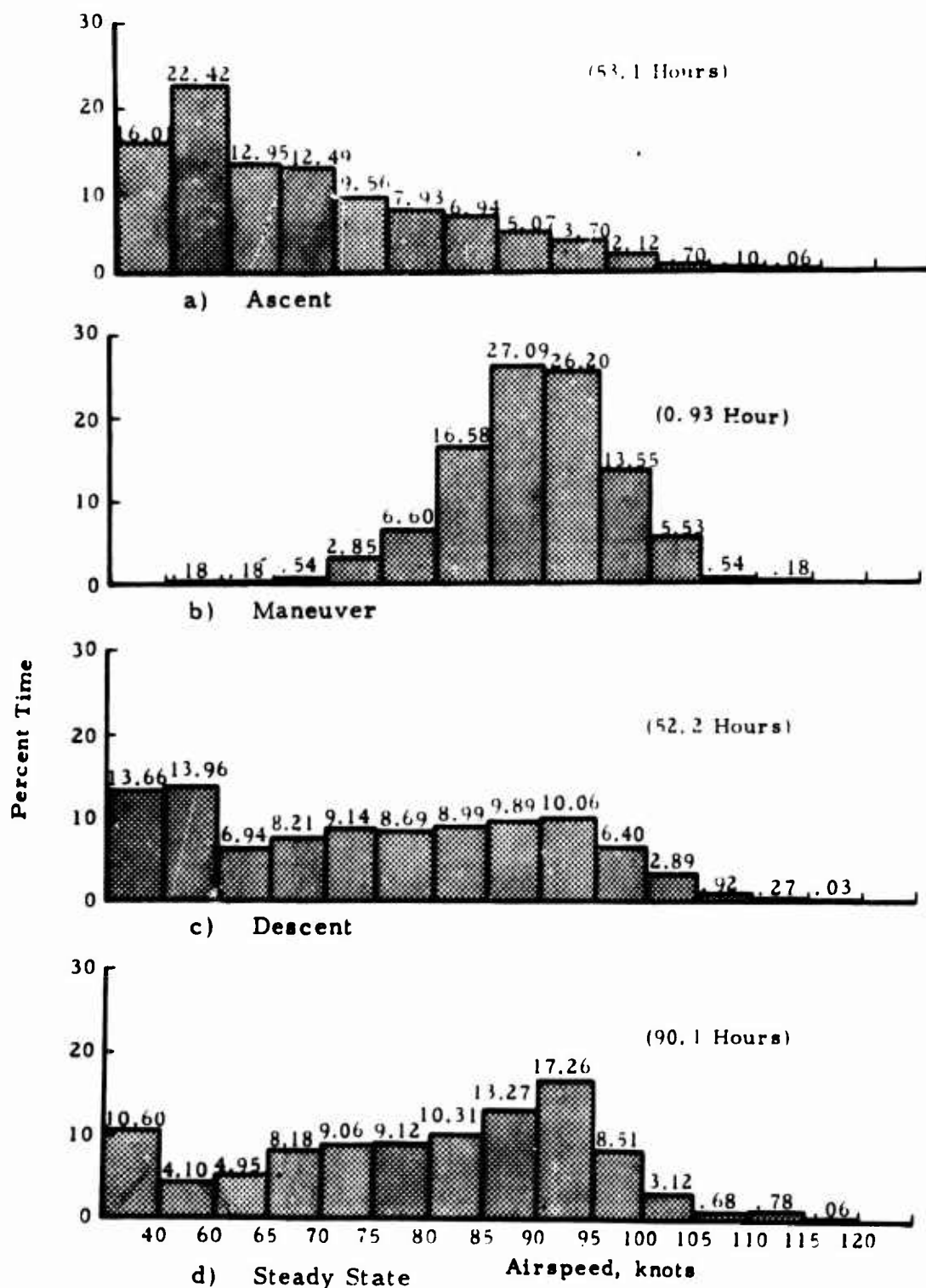


Figure 19. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Airspeed Range (Sample I).



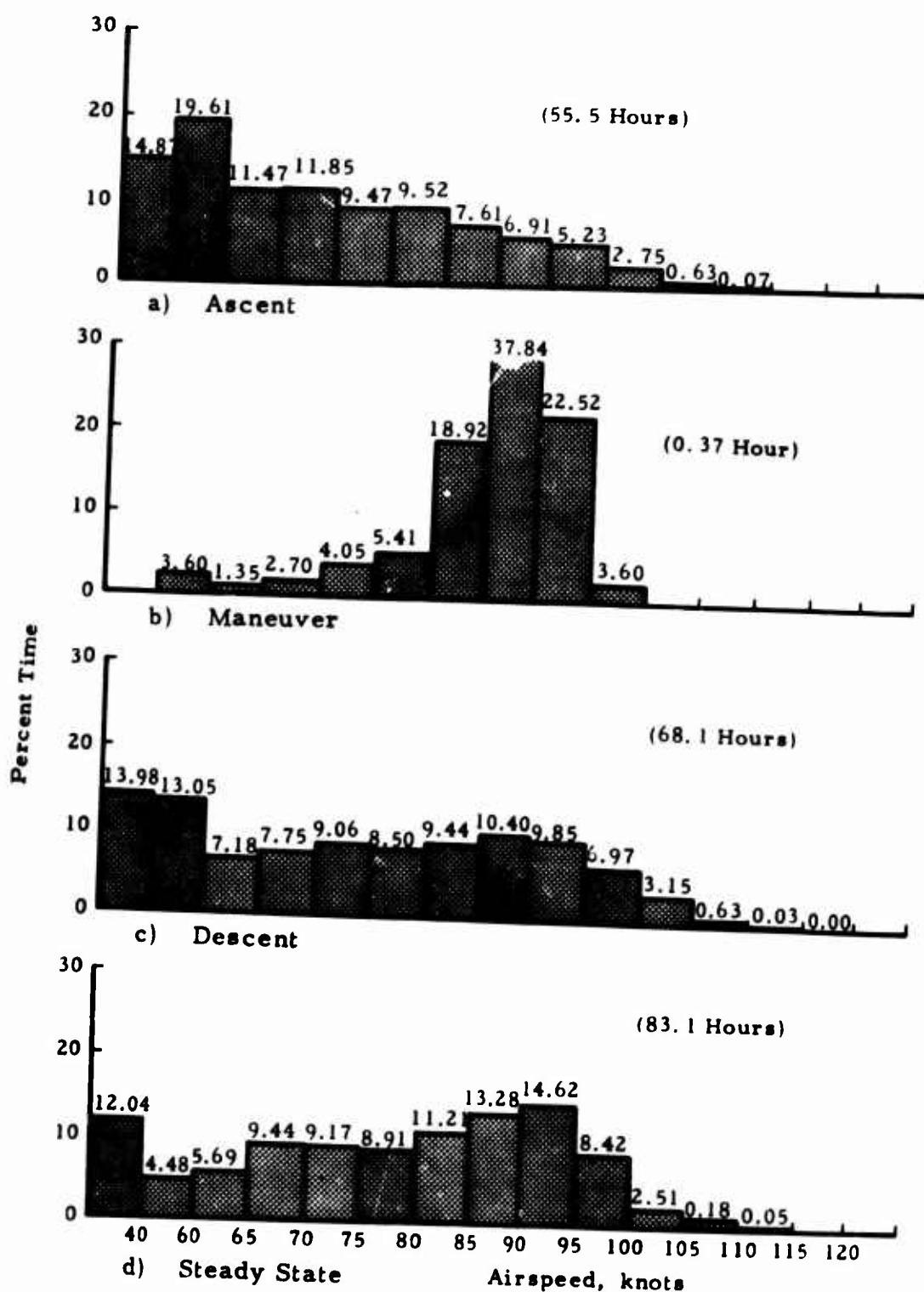


Figure 20. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Airspeed Range (Sample II).

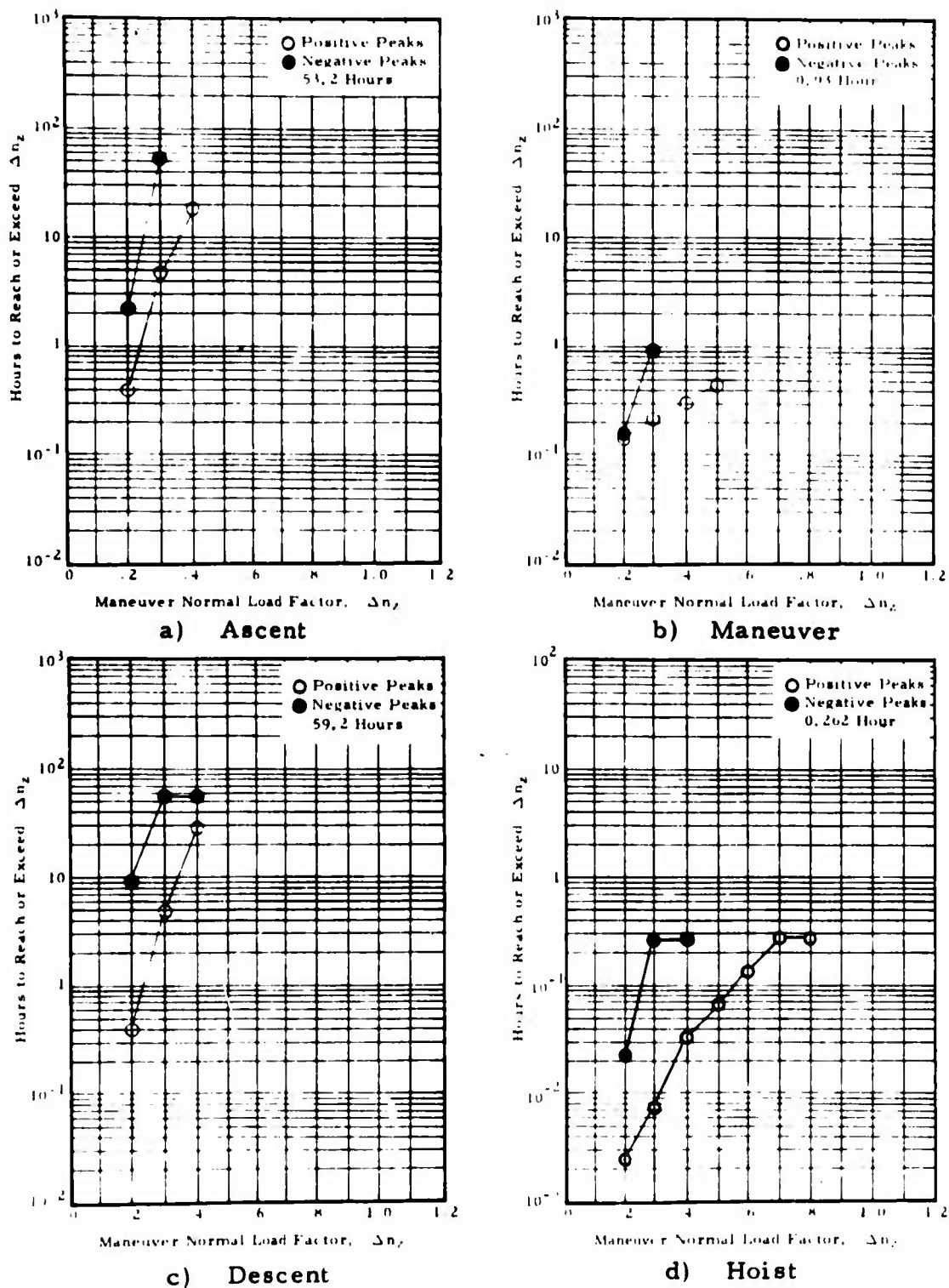
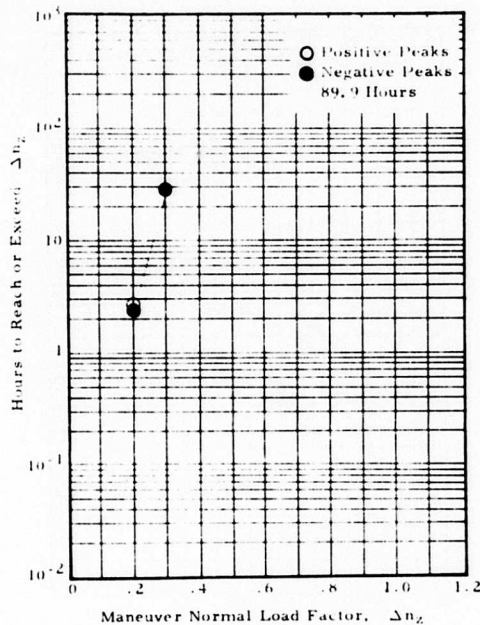
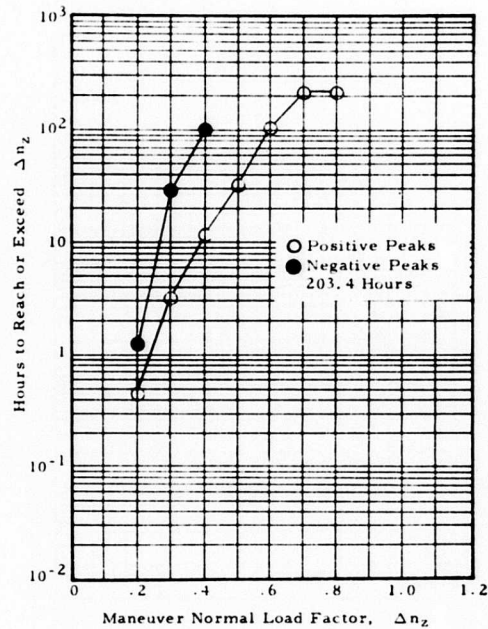


Figure 21. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Mission Segment (Sample I).

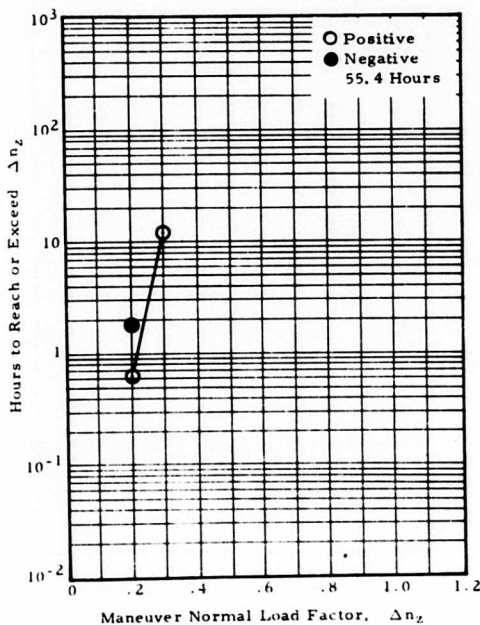


e) Steady State

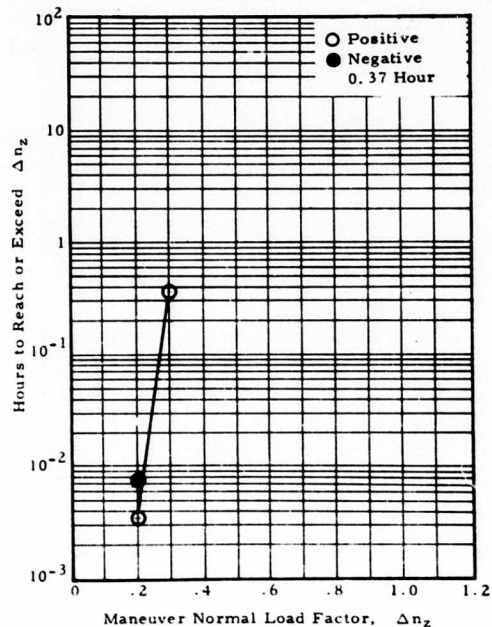


f) Composite

Figure 21 - Concluded

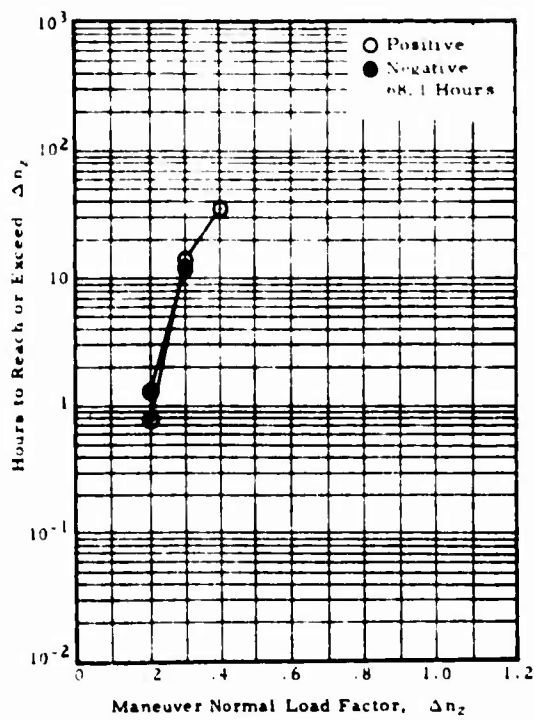


a) Ascent

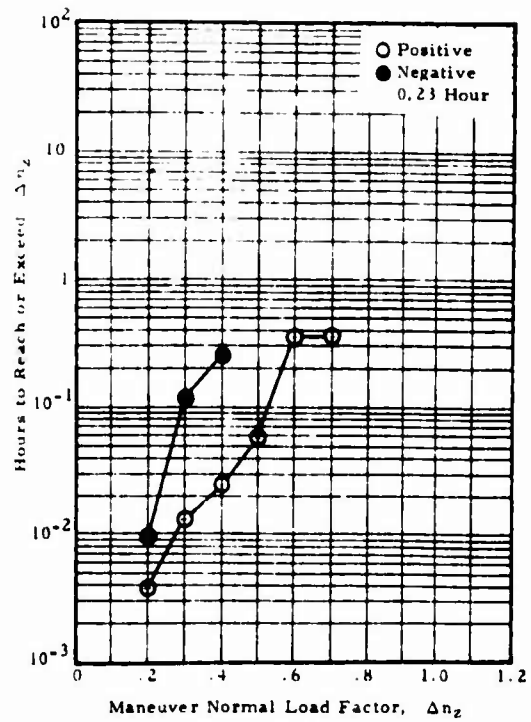


b) Maneuver

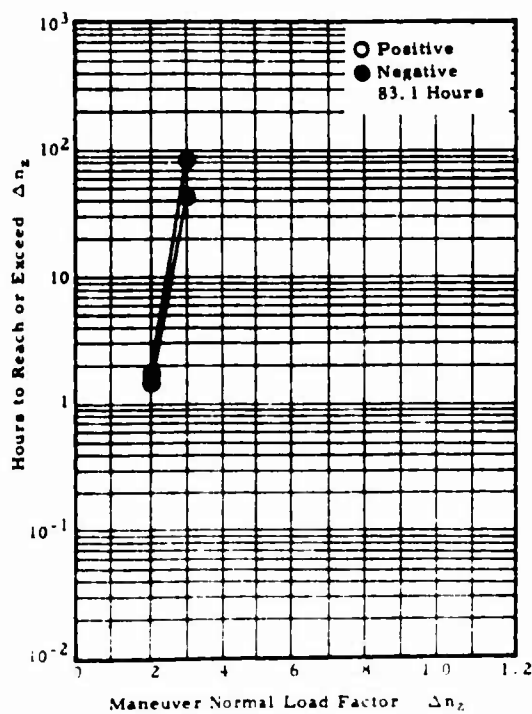
Figure 22. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Mission Segment (Sample II).



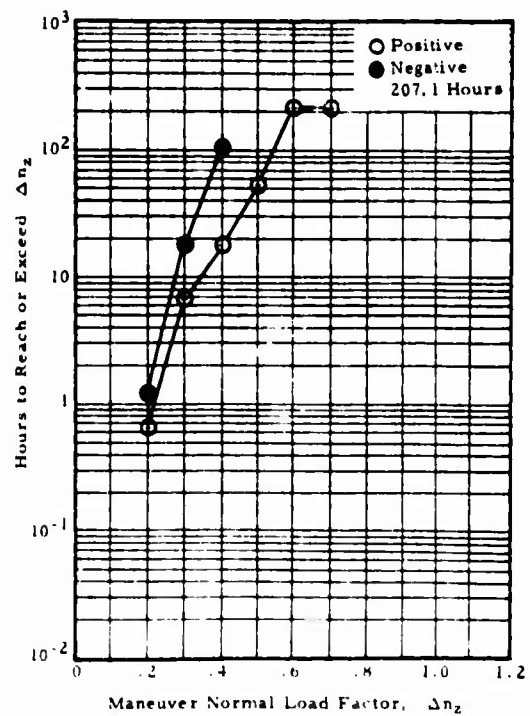
c) Descent



d) Hoist

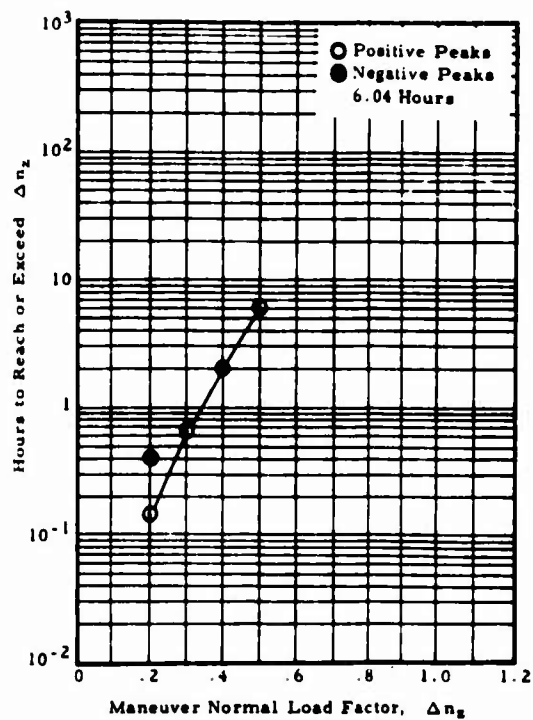


e) Steady State

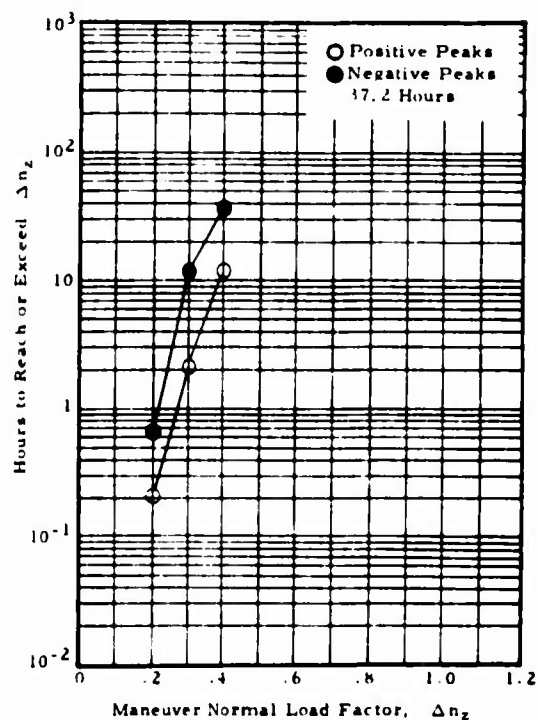


f) Composite

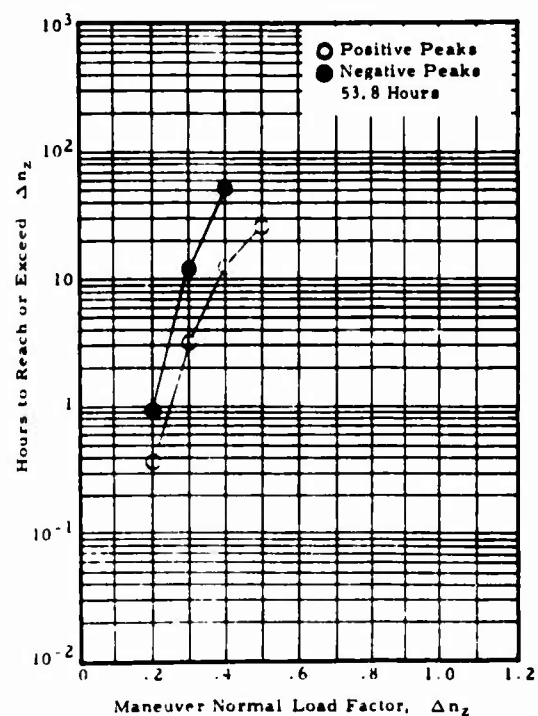
Figure 22 - Concluded



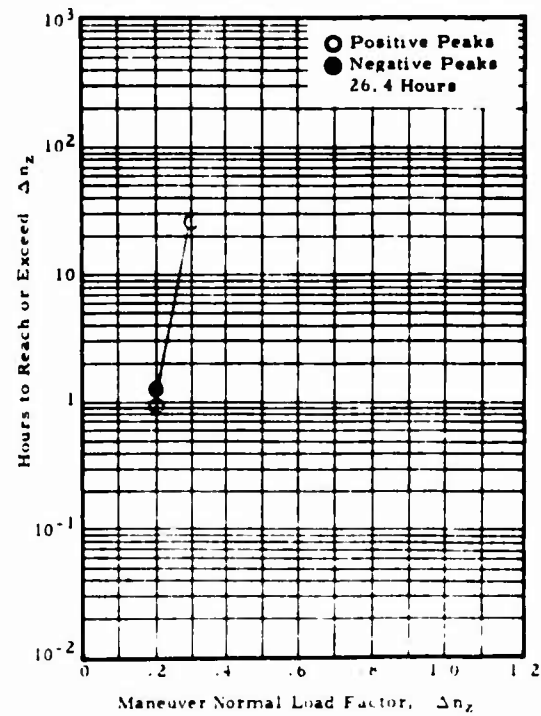
a) 21,000 to 23,000 lb



b) 23,000 to 25,000 lb

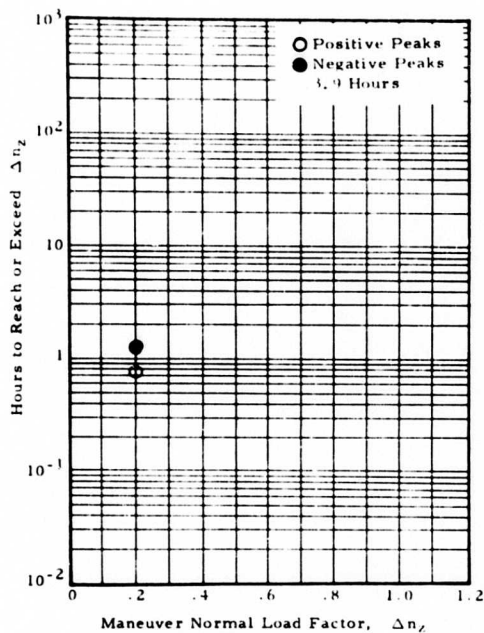


c) 25,000 to 27,000 lb

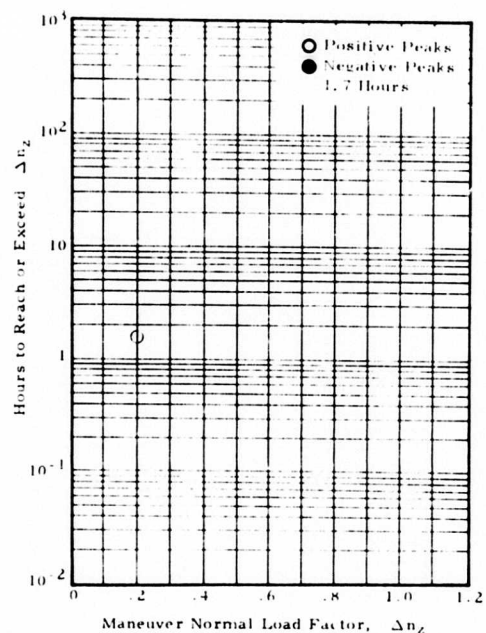


d) 27,000 to 29,000 lb

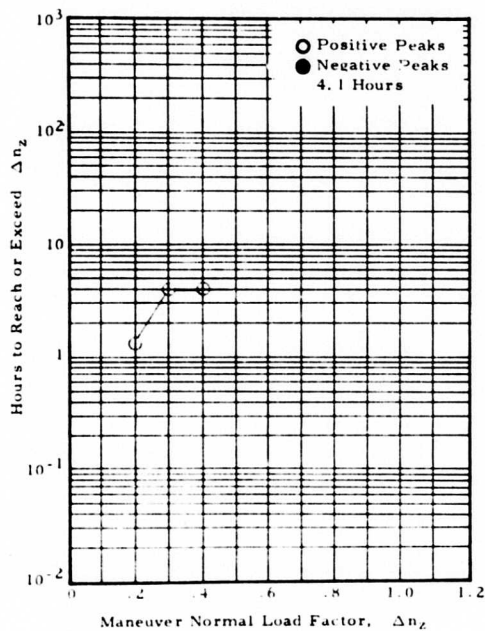
Figure 23. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Gross Weight Range (Sample I).



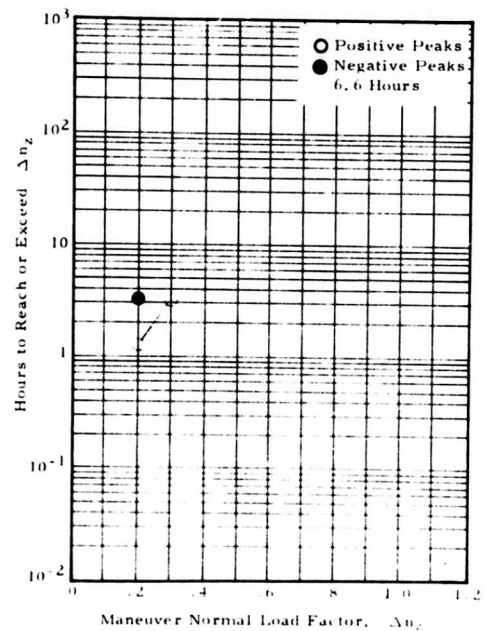
e) 29,000 to 31,000 lb



f) 31,000 to 33,000 lb

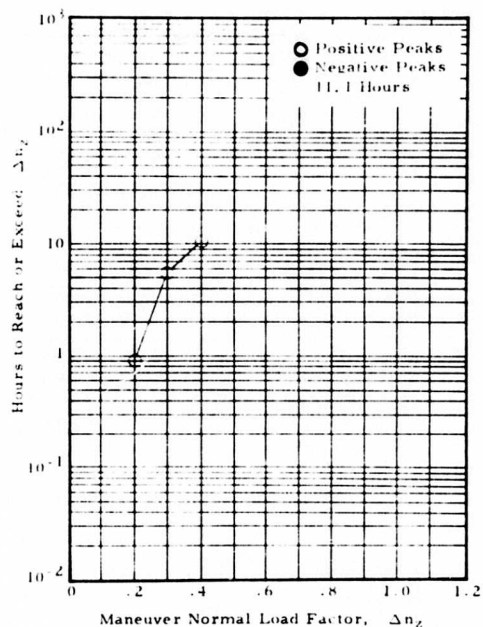


g) 35,000 to 36,000 lb

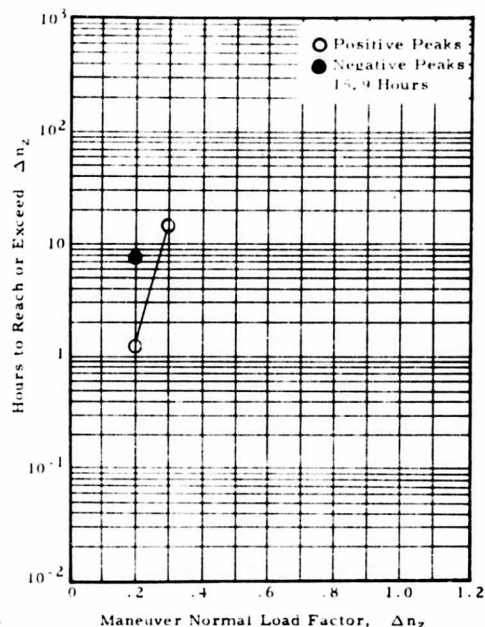


h) 36,000 to 37,000 lb

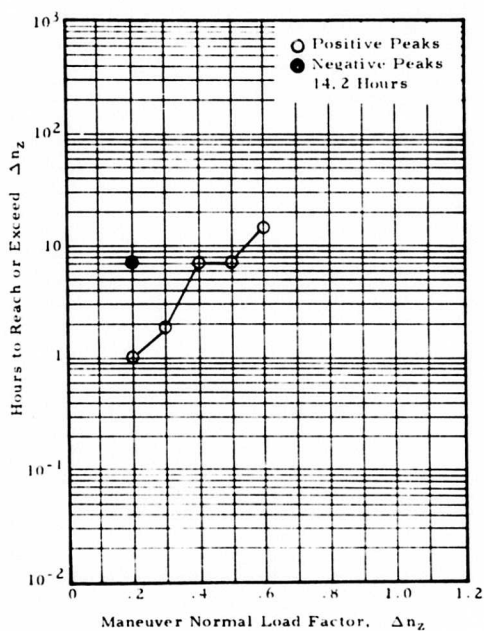
Figure 23 - Continued



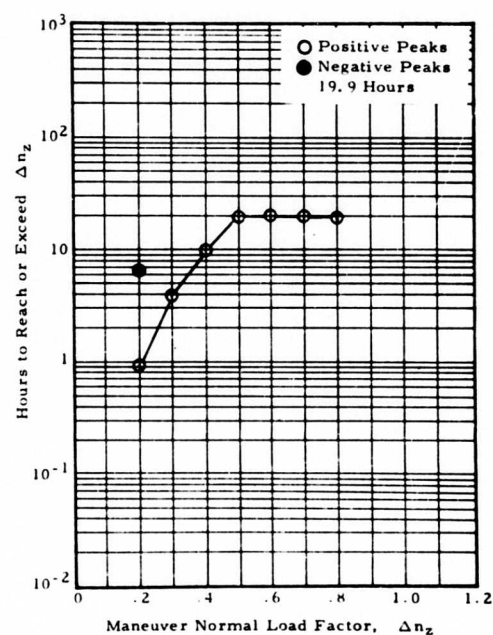
i) 37,000 to 38,000 lb



j) 38,000 to 39,000 lb

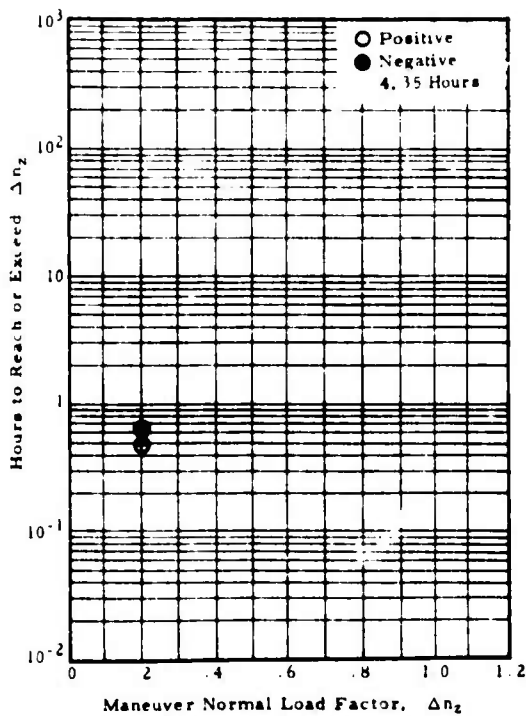


k) 39,000 to 40,000 lb

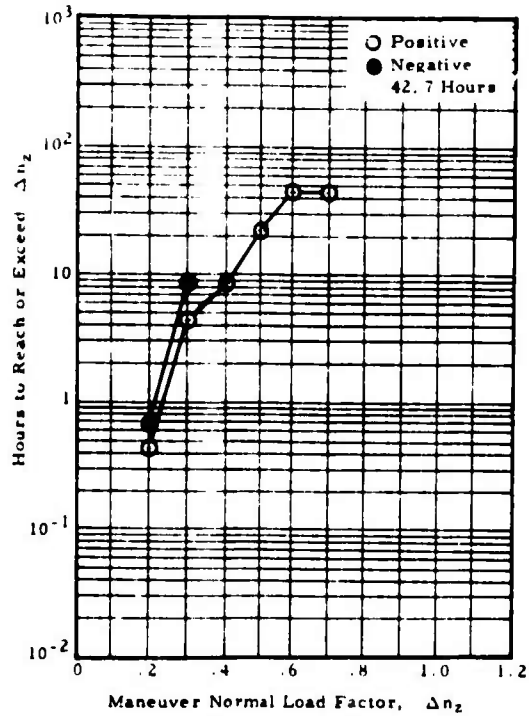


l) Above 40,000 lb

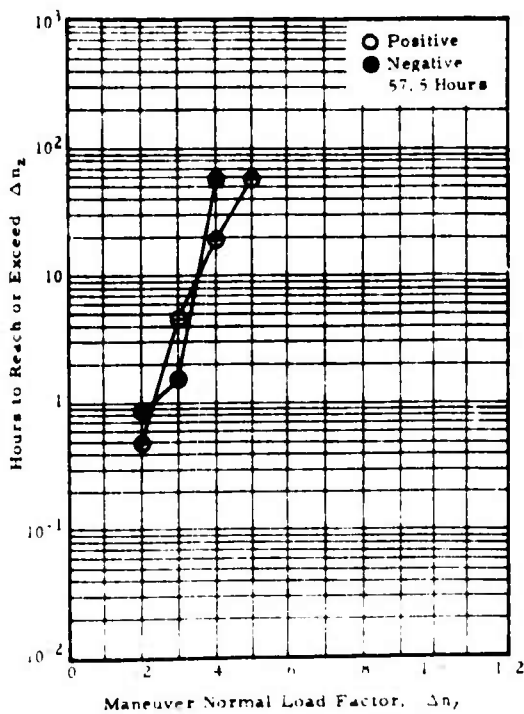
Figure 23 - Concluded



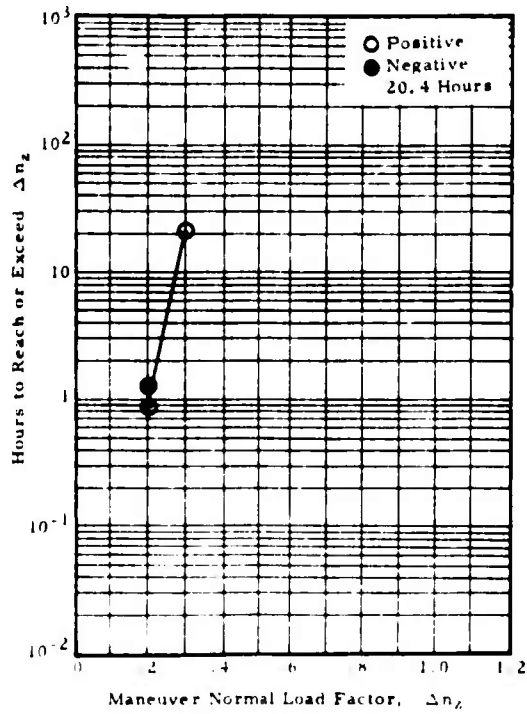
a) 21,000 to 23,000 lb



b) 23,000 to 25,000 lb



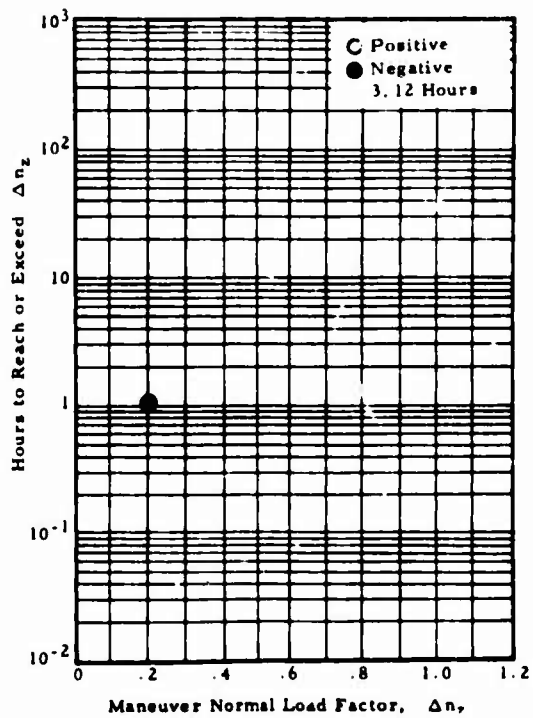
c) 25,000 to 27,000 lb



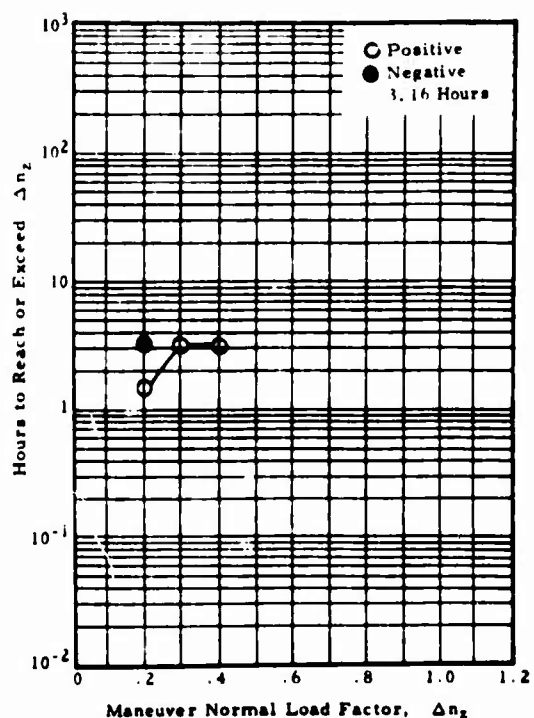
d) 27,000 to 29,000 lb

Figure 24. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Gross Weight Range (Sample II).

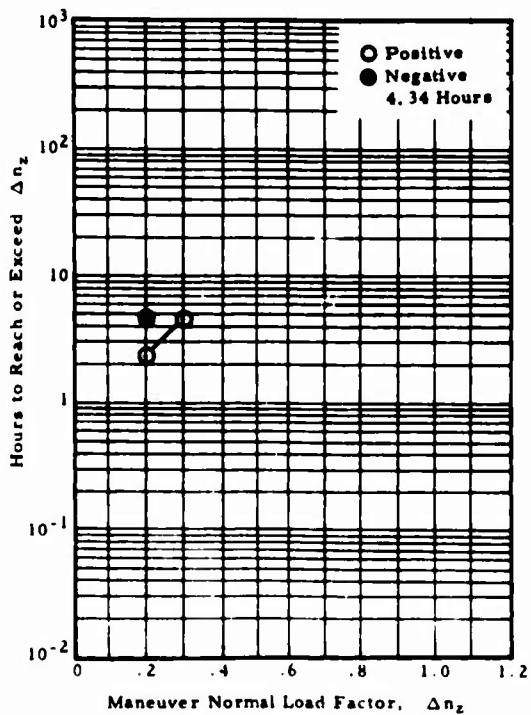




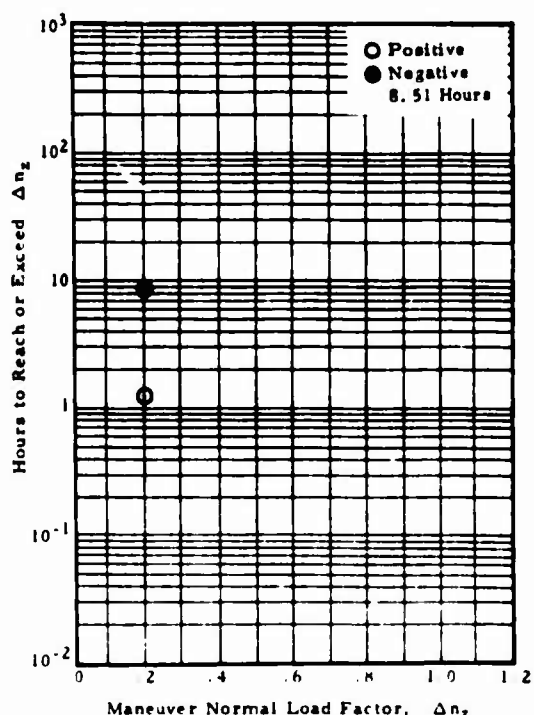
e) 29,000 to 31,000 lb



f) 33,000 to 35,000 lb

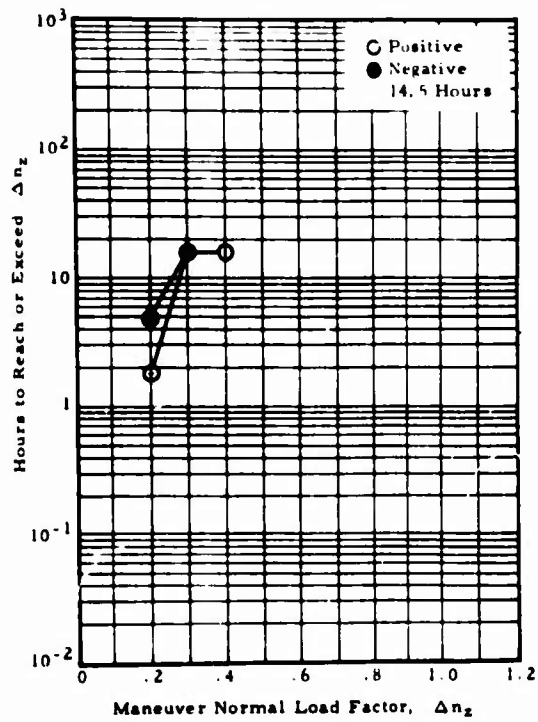


g) 35,000 to 36,000 lb

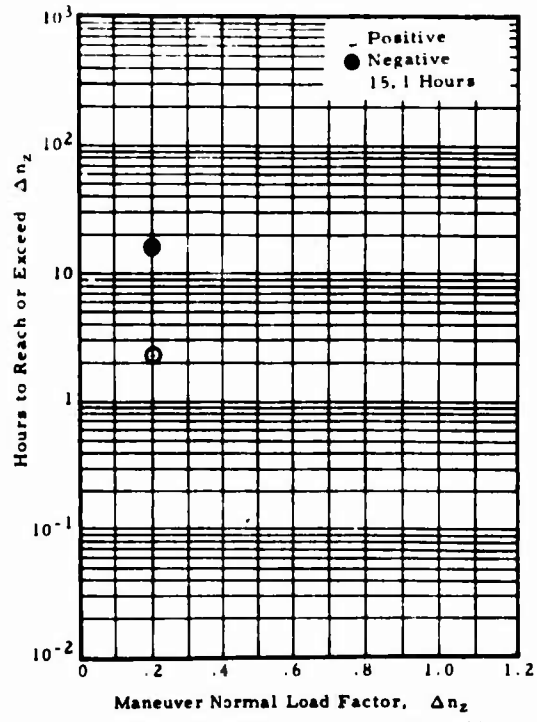


h) 36,000 to 37,000 lb

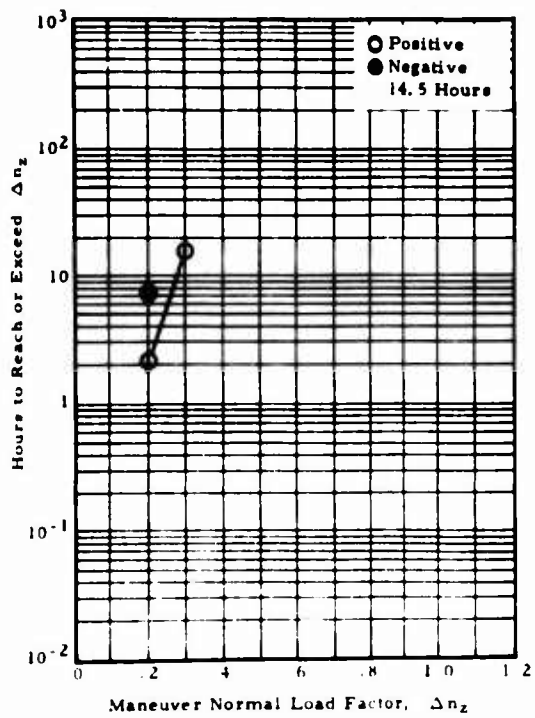
Figure 24 - Continued



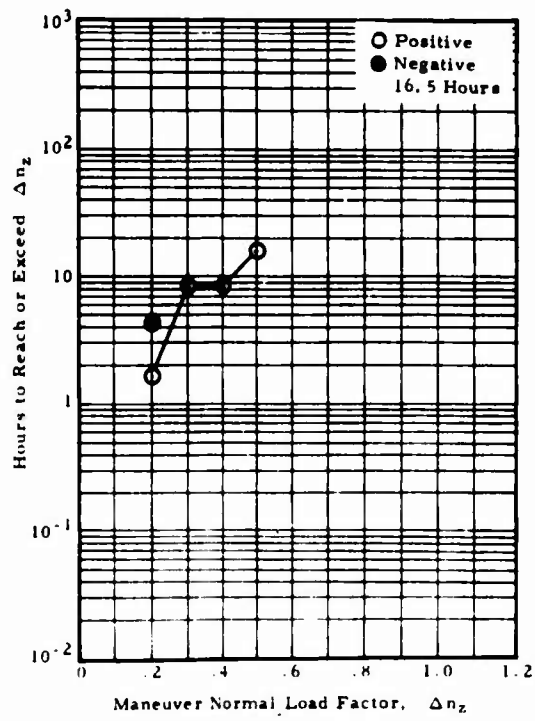
i) 37,000 to 38,000 lb



j) 38,000 to 39,000 lb

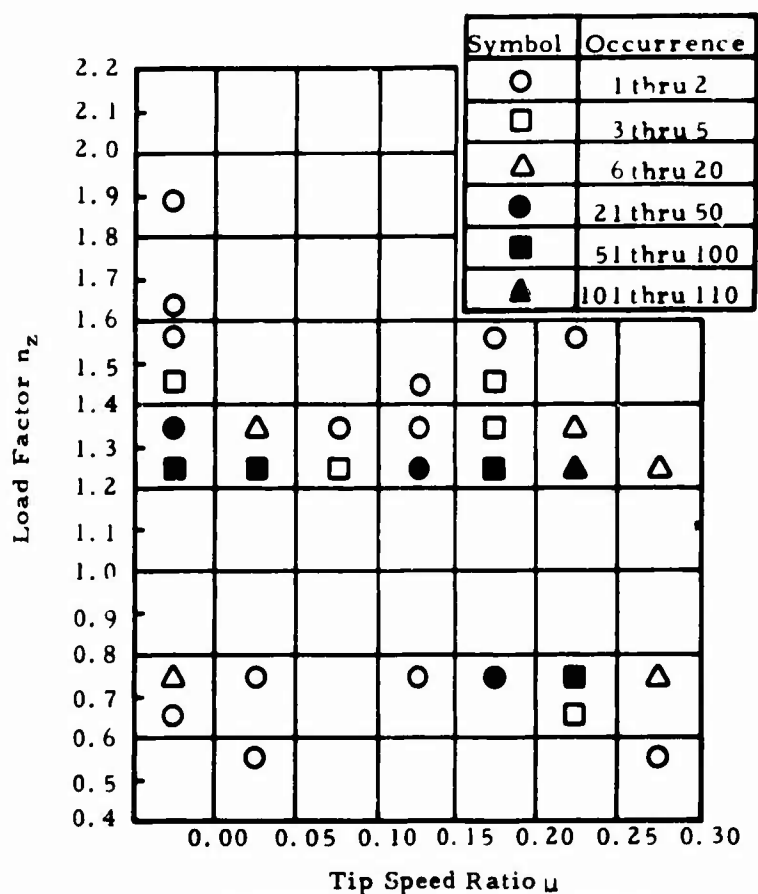


k) 39,000 to 40,000 lb



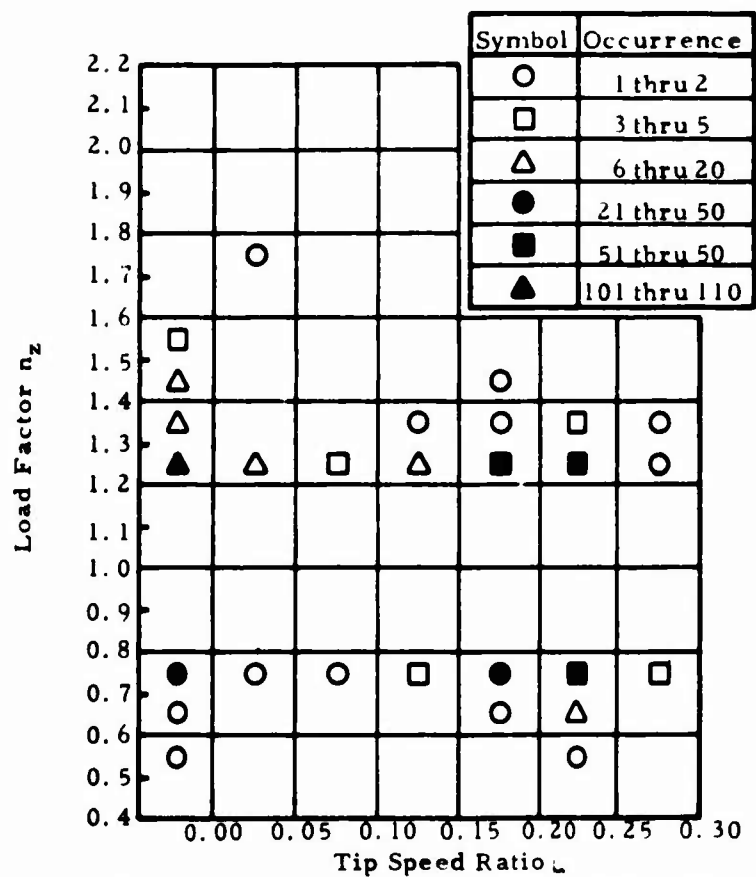
l) Above 40,000 lb

Figure 24 - Concluded



Load Factor $n_z$	Tip Speed Ratio $u$							Total
	0.00 to 0.05	0.00 to 0.05	0.05 to 0.10	0.10 to 0.15	0.15 to 0.20	0.20 to 0.25	0.25 to 0.30	
1.8 to 2.0	1							1
1.7 to 1.8								
1.6 to 1.7	1							1
1.5 to 1.6	2				1	1		4
1.4 to 1.5	5			1	4			10
1.3 to 1.4	24	8	2	2	5	6		47
1.2 to 1.3	46	60	4	21	82	104	6	373
0.8 to 1.2								
0.7 to 0.8	15	1		2	33	91	6	148
0.6 to 0.7	1					4		5
0.5 to 0.6		1					1	2
Total	145	70	6	26	125	206	13	591

Figure 25. Diagram and Tabulation of Maneuver Normal Load Factor Peaks in Ranges of Rotor Tip Speed Ratio (Sample I).



Load Factor $n_z$	Tip Speed Ratio $u$							Total
	<0.00	0.00 to 0.05	0.05 to 0.10	0.10 to 0.15	0.15 to 0.20	0.20 to 0.25	0.25 to 0.30	
1.8 to 2.0								
1.7 to 1.8		1						1
1.6 to 1.7								
1.5 to 1.6	3							3
1.4 to 1.5	7				1			8
1.3 to 1.4	11			1	2	3	1	18
1.2 to 1.3	109	12	5	16	61	88	2	293
0.8 to 1.2								
0.7 to 0.8	26	1	2	5	34	93	3	164
0.6 to 0.7	2				1	6		9
0.5 to 0.6	1					1		2
Total	159	14	7	22	99	191	6	498

Figure 26. Diagram and Tabulation of Maneuver Normal Load Factor Peaks in Ranges of Rotor Tip Speed Ratio (Sample II).

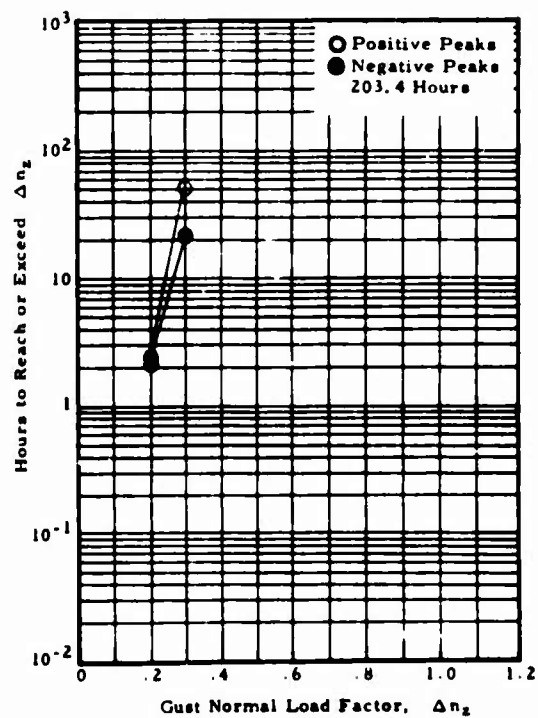


Figure 27. Exceedance Curves for Incremental Gust Normal Load Factor Peaks, Composite (Sample I).

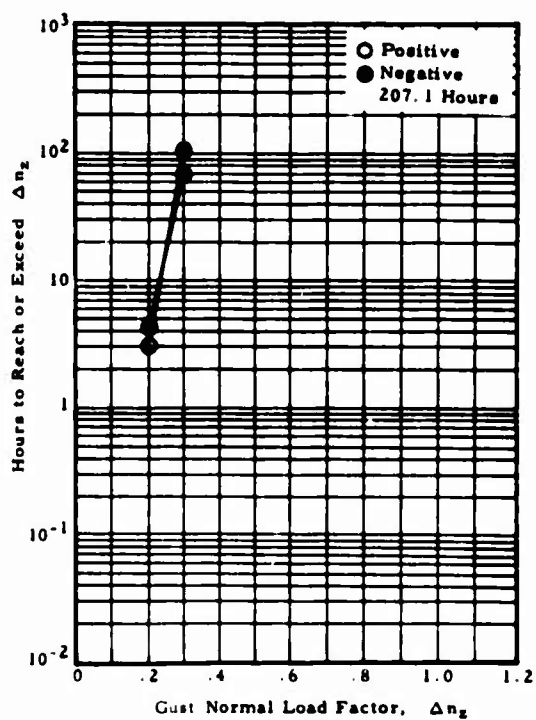


Figure 28. Exceedance Curves for Incremental Gust Normal Load Factor Peaks, Composite (Sample II).

TABLE IV. TIME FOR ALTITUDE VERSUS AIRSPEED BY  
WEIGHT AND MISSION SEGMENT, SAMPLE I  
MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT LESS, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS			0.6				0.6
40			0.5				0.5
60							
65			0.4				0.4
70			0.1				0.1
75			0.8				0.8
80			0.7				0.7
85			0.9				0.9
90			3.4				3.4
95			0.7				0.7
100			0.2				0.2
105							
110							
115							
120							
SUM			8.3				8.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT LESS, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS			0.2				0.2
40							
60							
65							
70							
75							
80			0.2				0.2
85			2.1				2.1
90			3.1				3.1
95			0.5				0.5
100							
105							
110							
115							
120							
SUM			6.1				6.1

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT LESS, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS			0.8				0.8
40			0.5				0.5
60							
65			0.4				0.4
70			0.1				0.1
75			0.8				0.8
80			0.9				0.9
85			3.0				3.0
90			6.5				6.5
95			1.2				1.2
100			0.2				0.2
105							
110							
115							
120							
SUM			14.4				14.4

TABLE IV - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.3	4.0	5.3				9.6
40		0.7	7.7	0.1			8.5
60			4.1	0.5			4.7
65			3.9	0.4			4.4
70			2.3	0.2			2.6
75			7.6	0.1			7.7
80			5.2	1.8			7.0
85			8.8	1.7			10.5
90			8.6	0.9			9.5
95			4.3	2.7			7.0
100			0.8	0.5			1.4
105							
110							
115							
120							
SUM	0.3	4.7	55.7	8.9			72.6

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS							
40							
60							
65							
70							
75							
80							
85			0.2	0.6			0.8
90			1.2	0.9			2.1
95			0.3				0.3
100							
105							
110							
115							
120							
SUM			1.7	1.5			3.3

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.0	9.2	11.3				21.5
40	0.4	4.8	10.8				16.0
60	0.1	1.2	4.5				5.8
65	0.2	1.5	4.2				5.9
70		0.9	7.3				8.2
75		0.8	12.7	0.8			14.4
80		0.9	16.3	0.8			18.0
85		0.5	22.0	7.3			29.8
90		0.8	27.7	5.2			33.6
95		0.5	13.6	1.7			15.8
100			8.8	1.5			10.3
105			5.1	0.5			5.6
110			1.0	1.2			2.2
115			0.3	0.1			0.4
120							
SUM	1.8	20.9	145.7	19.2			187.6

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.1	9.5	8.5				18.0
40							
60							
65							
70			0.9	0.3			1.2
75			2.5				2.5
80			4.1	2.2			6.2
85			11.5	4.8			16.4
90			21.0	6.6			27.6
95			8.8	2.2			11.0
100			5.1	4.3			9.4
105			2.7	2.2			4.9
110			1.1	0.5			1.6
115							
120							
SUM	0.1	9.5	66.1	23.1			98.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.4	22.7	25.0				49.1
40	0.4	5.5	18.5	0.1			24.5
60	0.1	1.2	8.7	0.5			10.5
65	0.2	1.5	8.1	0.4			10.3
70		0.9	10.6	0.5			11.9
75		0.8	22.8	0.9			24.5
80		0.9	25.5	4.8			31.2
85		0.5	42.5	14.4			57.4
90		0.8	58.5	13.6			72.8
95		0.5	27.1	6.6			34.2
100			14.7	6.3			21.0
105			7.9	2.7			10.6
110			2.1	1.8			3.9
115			0.3	0.1			0.4
120							
SUM	2.2	35.1	272.3	52.7			362.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.8	22.3	35.7				59.8
40	0.2	7.6	58.0	1.6			67.4
60		1.7	25.2	2.2			29.1
65		1.0	28.6	6.8			36.4
70		1.0	38.8	7.2			47.0
75		0.9	32.6	9.7			43.1
80		0.7	39.1	19.3			59.2
85			28.3	15.5			43.8
90			28.0	9.0			37.0
95			13.3	2.8			16.2
100			3.7	0.2			3.9
105							
110							
115							
120							
SUM	2.0	35.2	331.3	74.4			442.9



TABLE IV - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS							
40							
60							
65							
70							
75							
80			2.6	2.4			5.0
85			3.1	2.4			5.4
90			2.9	0.1			3.0
95			1.6	0.6			2.2
100			1.4	0.4			1.8
105			0.2				0.2
110				0.1			0.1
115							
120							
SUM			11.8	6.0			17.8

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.8	42.2	55.3				101.3
40	2.2	28.3	42.9	2.4			75.7
60		9.0	21.2	4.4			34.6
65	0.3	6.8	25.2	2.9			35.2
70	0.1	7.3	36.8	3.9			48.0
75	0.1	5.6	53.5	9.4			68.5
80		4.1	77.1	16.5			97.7
85		2.8	96.0	26.8			125.6
90		0.7	113.4	22.4			136.9
95		0.4	63.0	17.8			81.2
100		0.1	33.4	4.1			37.7
105		0.1	6.4	1.7			8.2
110			3.1				3.1
115			0.2				0.2
120							
SUM	6.4	107.4	627.4	112.5			853.6

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	8.7	53.0	76.7				138.4
40		0.5	0.5	4.7			5.7
60		0.1		6.0			6.1
65		0.1	1.2	13.2			14.5
70			7.5	20.0			27.5
75			22.5	33.8			56.3
80			47.8	65.6			113.4
85			89.6	66.0			155.6
90			150.0	89.7			239.7
95			89.0	35.8			124.7
100			13.9	20.4			34.3
105			0.7	0.1			0.8
110							
115							
120							
SUM	8.7	53.8	499.3	355.2			917.0

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG.							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	14.3	117.5	167.7				299.5
40	2.4	36.4	101.4	8.7			148.8
60		10.9	46.4	12.6			69.8
65	0.3	7.9	55.0	22.9			86.1
70	0.1	8.3	83.1	31.1			122.5
75	0.1	6.5	108.5	52.9			168.0
80		4.8	166.7	103.8			275.3
85		2.8	217.0	110.7			330.5
90		0.7	294.2	121.3			416.2
95		0.4	166.8	57.0			224.3
100		0.1	52.4	25.2			77.7
105		0.1	7.3	1.8			9.2
110			3.1	0.1			3.2
115			0.2				0.2
120							
SUM	17.1	196.4	1469.8	548.1			2231.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. ASCENT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	5.3	34.8	66.4				106.6
40	0.2	10.9	93.7	3.4			108.1
60	1.0	6.0	44.2	3.0			54.2
65	0.7	2.3	52.0	5.6			60.6
70	0.2	2.3	56.6	10.9			70.0
75		1.2	53.6	12.4			67.2
80		0.8	49.6	19.2			69.7
85		0.2	47.3	17.9			65.4
90		0.1	27.5	11.6			39.2
95			18.5	7.0			25.5
100			7.6	1.4			9.0
105			1.7	0.1			1.8
110				0.2			0.2
115							
120							
SUM	7.4	58.7	518.7	92.7			677.4

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. MANUVR							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS							
40			0.1				0.1
60			0.1				0.1
65			0.3				0.3
70			1.0				1.0
75			1.4				1.4
80			1.5	1.0			2.5
85			4.5	3.7			8.2
90			6.7	2.1			8.8
95			3.2	1.4			4.6
100			0.3	1.0			1.3
105			0.1				0.1
110							
115							
120							
SUM			19.2	9.2			28.4

TABLE IV - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	8.1	50.2	62.2				120.4
40	4.3	25.6	52.3	0.2			82.5
60	1.0	8.8	26.0	1.3			37.0
65	0.7	5.3	24.0	3.2			33.3
70	1.1	6.5	37.6	7.4			52.6
75	0.8	8.3	55.8	11.3			76.2
80	0.2	7.1	78.8	13.9			99.9
85	1.0	2.7	102.2	21.3			127.2
90	0.1	2.6	99.7	28.5			130.9
95		0.5	73.1	14.4			89.0
100		0.4	29.9	11.0			41.3
105			10.3	4.7			15.0
110			1.8	1.8			3.7
115			0.3	0.0			0.4
120							
SUM	17.2	117.9	654.1	119.1			908.3

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	14.5	106.0	100.8				221.4
40		0.4	27.6	1.3			29.3
60			14.3	1.1			15.4
65			3.1	5.9			9.1
70			9.8	15.2			25.0
75		0.7	40.0	33.7			74.5
80		0.2	104.9	97.7			202.8
85		0.4	174.9	170.3			345.6
90			208.1	228.8			436.9
95			95.6	70.6			166.2
100			45.7	21.5			67.3
105			1.2	7.2			8.3
110				12.5			12.5
115				1.7			1.7
120							
SUM	14.5	107.7	826.1	667.6			1615.9

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	27.9	191.0	229.4				448.4
40	4.4	36.9	173.7	5.0			220.0
60	2.0	14.7	84.6	5.3			106.7
65	1.4	7.7	79.4	14.7			103.2
70	1.3	8.8	105.0	33.5			148.5
75	0.8	10.1	150.9	57.5			219.4
80	0.2	8.1	234.7	131.8			374.8
85	1.0	3.3	328.9	213.2			546.4
90	0.1	2.7	342.0	270.9			615.7
95		0.5	190.4	93.5			284.4
100		0.4	85.5	34.9			118.9
105			13.2	12.0			25.2
110			1.8	14.6			16.4
115			0.3	1.8			2.1
120							
SUM	39.1	284.3	2016.0	888.6			3230.0

TABLE IV - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.4	28.3	33.6				65.4
40	1.3	14.6	53.4	4.5			73.8
60	0.1	5.6	31.6	3.1			40.4
65	0.2	7.5	25.4	2.4			38.6
70	0.4	4.1	29.6	3.2			37.4
75	0.4	2.1	40.1	5.1			47.8
80		1.9	35.7	12.1			49.8
85		0.4	28.5	7.3			36.2
90		0.8	15.5	13.2			29.5
95			7.4	8.3			15.6
100			4.4	2.3			6.8
105			0.6	0.2			0.7
110							
115							
120							
SUM	5.8	65.4	308.8	62.0			441.9

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS							
40							
60							
65							
70			0.1	0.5			0.6
75			1.1	0.3			1.5
80			1.5	0.1			1.5
85			0.3	0.5			0.8
90				0.8			0.8
95				0.5			0.5
100							
105							
110							
115							
120							
SUM			3.0	2.6			5.6

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.2	17.1	16.2				35.5
40	1.0	13.2	15.1	0.5			29.7
60		2.0	7.6	0.9			10.5
65		2.7	12.2	3.0			17.9
70	0.3	2.0	13.5	3.2			19.0
75		1.5	14.0	3.3			18.8
80		0.5	22.4	9.7			32.6
85	0.3	0.4	30.0	8.5			39.1
90	0.1	2.4	32.9	5.4			40.8
95		1.3	23.7	12.6			37.5
100		0.7	6.9	3.2			10.8
105			2.2	1.5			3.7
110				0.6			0.6
115							
120							
SUM	3.8	43.8	196.6	52.5			296.7

TABLE IV - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	6.5	32.7	20.5				59.8
40			11.5				11.5
60			9.2				9.2
65			5.8	1.9			7.7
70		0.2	14.8	2.4			17.4
75		0.2	27.5	7.4			35.0
80			54.9	39.1			94.1
85		0.7	103.0	52.5			161.2
90		0.3	123.3	69.9			193.5
95			93.7	53.0			146.8
100			40.7	12.0			52.7
105			12.4	8.5			20.9
110			0.1	27.9			28.0
115				1.4			1.4
120							
SUM	6.5	34.1	522.4	276.0			839.0

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	12.2	78.2	70.3				160.7
40	2.3	27.8	80.0	5.0			115.1
60	0.1	7.6	48.4	4.1			60.1
65	0.2	10.2	46.4	7.4			64.2
70	0.6	6.3	58.0	9.4			74.3
75	0.4	3.8	82.7	16.1			103.0
80		2.5	114.5	61.0			177.9
85	0.3	1.4	166.7	68.9			237.3
90	0.1	3.4	171.7	89.3			264.5
95		1.3	124.8	74.4			200.4
100		0.7	52.0	17.6			70.3
105			15.1	10.2			25.4
110			0.1	28.5			28.6
115				1.4			1.4
120							
SUM	16.1	143.3	1030.7	393.1			1583.3

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 29000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS		3.8	9.1				12.9
40		3.7	6.5	0.9			11.1
60		0.3	6.1	0.9			7.2
65		0.1	5.3	2.1			7.5
70			4.9	1.9			6.8
75		0.7	3.0	0.2			3.9
80			3.6	0.4			4.0
85			0.9	0.2			1.1
90			0.1	1.1			1.2
95				0.1			0.1
100							
105							
110							
115							
120							
SUM		8.6	39.4	7.8			55.8

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 29000, BY MISSION SEG. DESCNT							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.1	3.6	6.6				10.3
40		0.7	2.7				3.4
60		0.1	1.4				1.5
65		0.6	1.7				2.3
70		0.1	4.4	0.6			5.0
75		0.1	3.9	0.8			4.7
80			4.1	0.4			4.5
85		0.2	4.0	2.4			6.6
90			3.4	0.8			4.2
95		0.1	1.3	0.3			1.7
100		0.6		0.4			1.0
105				0.2			0.2
110							
115							
120							
SUM	0.1	6.0	33.3	5.9			45.4

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 29000, BY MISSION SEG. STEADY							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.0	5.8	7.2				15.0
40							
60							
65				1.5			1.5
70				6.6			6.6
75			0.4	10.2			10.6
80			1.2	34.3			35.5
85			4.4	20.1			24.4
90			18.1	8.7			26.8
95			6.2	1.8			8.1
100				1.5			1.5
105				1.2			1.2
110							
115							
120							
SUM	2.0	5.8	37.6	85.8			131.2

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 29000, BY MISSION SEG. SUM							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.1	13.1	22.9				38.2
40		4.4	9.2	0.9			14.5
60		0.4	7.4	0.9			8.7
65		0.7	7.0	3.6			11.3
70		0.1	9.2	9.2			18.5
75		0.8	7.2	11.2			19.1
80			8.9	35.2			44.0
85		0.2	9.3	22.6			32.1
90			21.6	10.5			32.1
95		0.1	7.5	2.2			9.8
100		0.6		1.9			2.5
105				1.4			1.4
110							
115							
120							
SUM	2.1	20.4	110.2	99.6			232.3

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.1	1.6	6.4				8.1
40			2.9	0.2			3.1
60			0.5	0.4			0.9
65			1.0	0.7			1.7
70							
75							
80							
85							
90							
95							
100							
105							
110							
115							
120							
SUM	0.1	1.6	10.8	1.3			13.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS							
40							
60							
65							
70							
75				0.8			0.8
80				0.3			0.3
85							
90							
95							
100							
105							
110							
115							
120							
SUM				1.1			1.1

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.4	7.5	9.0				17.9
40		0.4	6.4				6.8
60		0.1	1.8				1.9
65			0.1				0.1
70			0.5	0.3			0.8
75			0.3	0.9			1.2
80				0.3			0.3
85							
90							
95							
100							
105							
110							
115							
120							
SUM	1.4	8.0	18.1	1.5			29.0

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.0	19.1	18.2				40.2
40			3.0				8.0
60			1.9				1.9
65			0.7	0.7			1.5
70			0.1	2.3			2.4
75				4.0			4.0
80				0.6			0.6
85							
90							
95							
100							
105							
110							
115							
120							
SUM	3.0	19.1	28.9	7.7			58.6

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	4.5	28.2	33.6				66.2
40		0.4	17.3	0.2			17.9
60		0.1	4.2	0.4			4.7
65			1.8	1.4			3.3
70			0.6	2.6			3.2
75			0.3	5.7			6.0
80				1.2			1.2
85							
90							
95							
100							
105							
110							
115							
120							
SUM	4.5	28.7	57.8	11.5			102.5

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 33000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS		0.6	6.1				6.7
40			4.4	0.5			4.9
60			3.3	0.7			4.0
65			1.0				1.0
70			0.7	0.4			1.1
75							
80							
85							
90							
95							
100							
105							
110							
115							
120							
SUM		0.6	15.4	1.7			17.7



TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 33000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.7	6.9	9.1				16.6
40	0.2	1.8	17.8				19.5
60		0.2	7.3				7.5
65			6.7				6.7
70			6.6	0.8			7.4
75			4.8	0.6			5.4
80			1.5	1.1			2.6
85			0.3				0.3
90							
95							
100							
105							
110							
115							
120							
SUM	0.9	8.8	54.2	2.5			66.4

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 33000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.5	6.1	15.6				23.2
40			11.8	0.5			12.2
60			4.4	2.7			7.1
65			9.8	2.0			11.8
70			2.4	0.0			2.4
75			13.4	0.0			13.4
80							
85							
90							
95							
100							
105							
110							
115							
120							
SUM	1.5	6.1	57.4	5.2			70.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 33000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.2	13.5	30.8				46.5
40	0.2	1.8	34.0	1.0			37.0
60		0.2	15.0	3.4			18.7
65			17.5	2.0			19.4
70			9.7	1.3			11.0
75			16.2	0.7			16.9
80			1.5	1.1			2.6
85			0.3				0.3
90							
95							
100							
105							
110							
115							
120							
SUM	2.4	15.5	127.0	9.4			154.3

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 35000, BY MISSION SEG. ASCENT							
	LESS	1000	2000	5000	10000	15000	SUM
LESS		2.4	8.0				10.4
40		0.2	16.8	0.6			17.5
60			11.2	0.4			11.6
65			10.5	0.1			10.6
70			7.6	1.4			9.0
75			2.1	1.7			3.8
80			0.7	0.9			1.6
85							
90							
95							
100							
105							
110							
115							
120							
SUM		2.5	56.8	5.2			64.6

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 35000, BY MISSION SEG. DESCNT							
	LESS	1000	2000	5000	10000	15000	SUM
LESS		2.0	6.2				8.3
40		1.6	14.7				16.3
60		0.3	8.2	0.3			9.8
65			3.9	2.7			6.6
70			9.9	1.3			11.2
75			4.9	0.2			5.1
80			4.3	0.5			4.9
85			0.6	0.1			0.7
90							
95							
100							
105							
110							
115							
120							
SUM		3.9	52.8	5.2			61.9

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 35000, BY MISSION SEG. STEADY							
	LESS	1000	2000	5000	10000	15000	SUM
LESS		0.8	1.8				2.6
40			13.3	0.7			14.1
60			15.3	6.9			22.1
65			17.5	2.5			20.0
70			26.6	0.2			26.8
75			22.6	1.0			23.6
80			6.5	1.8			8.3
85							
90							
95							
100							
105							
110							
115							
120							
SUM		0.8	103.6	13.2			117.6

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 35000, BY MISSION SEG.							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS		5.2	16.0				21.2
40		1.8	44.8	1.4			47.9
60		0.3	34.7	7.6			42.5
65			32.0	5.3			37.3
70			44.1	2.9			47.0
75			29.6	2.9			32.5
80			11.5	3.3			14.8
85			0.6	0.1			0.7
90							
95							
100							
105							
110							
115							
120							
SUM		7.2	213.2	23.6			244.1

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 36000, BY MISSION SEG. ASCENT							
	LESS	1000	2000	5000	10000	15000	SUM
LESS		6.6	12.4				19.0
40		1.2	22.2	0.9			24.3
60		0.4	15.4	0.4			16.2
65		0.5	13.4	2.3			16.2
70		0.5	13.0	3.1			16.7
75		0.2	6.9	0.3			7.4
80			2.8				2.8
85			0.1	0.2			0.3
90							
95							
100							
105							
110							
115							
120							
SUM		9.5	86.3	7.2			103.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 36000, BY MISSION SEG. DESCENT							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.8	10.1	8.3				20.2
40	0.3	8.2	15.4				23.9
60		4.1	7.8	0.2			12.1
65		3.3	20.4	1.3			25.0
70		1.5	22.9	4.2			28.6
75		0.5	19.1	2.0			21.5
80			6.9	0.4			7.3
85			4.1	1.3			5.4
90			0.4	0.2			0.6
95				0.6			0.6
100							
105							
110							
115							
120							
SUM	2.2	27.6	105.3	10.2			145.2

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 36000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.2	4.5	2.0				7.6
40			3.7	1.6			5.3
60			18.7	3.4			22.1
65			19.8	6.1			25.9
70			22.9	5.9			28.8
75			37.9	4.4			42.3
80			12.0	2.0			14.0
85			1.7	0.2			1.9
90			0.1				0.1
95							
100							
105							
110							
115							
120							
SUM	0.2	4.5	119.6	23.5			147.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 36000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.0	21.2	23.6				46.8
40	0.3	9.4	41.2	2.4			53.4
60		4.5	42.0	4.0			50.4
65		3.8	53.6	9.7			67.1
70		2.0	58.7	13.3			74.0
75		0.6	63.9	6.7			71.2
80			21.7	2.4			24.2
85			5.9	1.6			7.5
90			0.5	0.2			0.7
95				0.6			0.6
100							
105							
110							
115							
120							
SUM	2.4	41.6	311.2	40.9			396.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 37000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.9	12.6	11.3				25.7
40		5.4	31.0	0.3			36.7
60		1.6	31.3	1.2			34.2
65		2.5	37.1	0.3			39.9
70		1.4	19.3	2.3			23.0
75		0.5	12.6	0.7			13.9
80			3.7	0.4			4.1
85			0.8	0.4			1.2
90			0.9	0.4			1.4
95			2.1	1.1			3.2
100			0.5	0.7			1.2
105			0.6				0.6
110							
115							
120							
SUM	1.9	24.0	151.4	7.8			185.0

TABLE IV - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 37000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.5	12.1	14.1				26.7
40		5.0	36.5	1.3			42.8
60		1.1	28.1	1.4			30.6
65		1.4	40.4	1.2			43.0
70		0.1	23.6	2.3			26.0
75		0.2	13.6	2.7			16.5
80			10.1	1.5			11.6
85			1.7	0.5			2.2
90			0.9	1.9			2.8
95				0.6			0.6
100			0.6	0.2			0.8
105							
110							
115							
120							
SUM	0.5	19.9	169.7	13.7			203.8

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 37000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.9	2.0	7.0				9.9
40			14.0	3.7			17.7
60			45.1	1.6			46.6
65			64.1	8.3			72.4
70			49.3	10.6			59.9
75			32.3	11.0			43.3
80			12.3	0.5			12.8
85			1.8	1.6			3.3
90				1.8			1.8
95			2.1	0.1			2.2
100			3.3	0.1			3.4
105			0.9				0.9
110							
115							
120							
SUM	0.9	2.0	232.2	39.2			274.3

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 37000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.2	26.7	32.4				62.3
40		10.4	81.5	5.3			97.2
60		2.8	104.4	4.2			111.4
65		3.8	141.6	9.8			155.3
70		1.4	92.2	15.2			108.8
75		0.7	58.6	14.4			73.7
80			26.1	2.4			28.5
85			4.3	2.5			6.8
90			1.9	4.2			6.0
95			4.2	1.8			6.1
100			4.4	1.0			5.4
105			1.6				1.6
110							
115							
120							
SUM	3.2	45.8	553.2	60.7			663.0

TABLE IV - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 38000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.1	10.8	35.4				49.3
40	0.6	7.4	87.7	4.1			99.8
60	0.4	5.7	56.0	5.8			67.8
65		3.4	59.2	2.3			64.9
70	1.0	1.4	22.5	1.2			26.2
75	0.3	1.0	16.1	0.8			18.2
80		0.1	5.3				5.4
85			1.3				1.3
90							
95							
100							
105							
110							
115							
120							
SUM	5.4	29.9	283.5	14.2			333.0

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 38000, BY MISSION SEG. DESCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.7	19.9	10.8				37.5
40	0.2	13.8	47.9	3.2			65.1
60		1.5	33.0	1.5			36.0
65		0.2	38.0	3.1			41.4
70		0.3	29.1	4.4			33.8
75			23.5	2.4			25.8
80		0.2	14.6	2.4			17.1
85			6.0	0.7			6.7
90			1.7	0.4			2.1
95			0.5				0.5
100							
105							
110							
115							
120							
SUM	0.9	35.9	211.1	18.1			266.0

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 38000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.3	1.0	6.4				7.7
40			19.2	8.8			28.1
60			43.1	3.5			46.6
65			53.7	32.9			86.6
70			66.5	23.6			90.0
75		0.0	57.5	16.3			73.8
80			14.3	3.0			17.4
85			1.0	0.7			1.7
90			0.7				0.7
95							
100							
105							
110							
115							
120							
SUM	0.3	1.1	262.4	88.8			352.7

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 38000, BY MISSION SEG.							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	4.1	31.8	55.6				94.5
40	0.8	21.2	154.8	16.1			193.0
60	0.4	7.2	132.1	10.8			150.4
65		3.6	151.0	38.3			192.9
70	1.0	1.7	113.0	29.3			150.0
75	0.3	1.1	97.0	19.4			117.8
80		0.3	34.2	5.4			39.9
85			8.3	1.5			9.8
90			2.4	0.4			2.8
95			0.5				0.5
100							
105							
110							
115							
120							
SUM	6.5	66.9	757.0	121.2			951.6

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 39000, BY MISSION SEG. ASCENT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.4	19.2	32.9				52.4
40	0.2	5.7	77.3	3.2			86.2
60		3.1	47.0	3.4			53.5
65	0.2	1.0	43.6	10.4			55.2
70		1.1	26.8	6.0			33.8
75	0.2	1.8	14.5	2.4			18.8
80	0.4	0.4	3.0				3.8
85			0.3				0.3
90			0.2				0.2
95							
100							
105							
110							
115							
120							
SUM	1.3	32.2	245.6	25.4			304.5

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 39000, BY MISSION SEG. DESCENT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.2	15.7	12.3				31.2
40	0.9	9.4	45.7	0.7			56.8
60	0.1	0.4	24.2	4.8			29.6
65		1.0	24.3	5.0			30.3
70		0.4	27.6	6.3			34.3
75		0.1	20.4	0.7			21.1
80		0.1	10.1	0.5			10.7
85			3.2	0.1			3.4
90			0.7	0.2			0.9
95			0.4				0.4
100							
105							
110							
115							
120							
SUM	4.2	27.0	168.9	18.5			218.6

TABLE IV - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 39000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS		4.2	6.2				10.5
40			24.4	3.5			27.9
60			25.6	15.0			40.6
65			53.1	35.1			88.3
70			52.6	25.3			77.9
75			38.5	15.5			54.0
80			19.7	2.9			22.5
85			2.7				2.7
90			2.1				2.1
95							
100							
105							
110							
115							
120							
SUM		4.2	224.9	97.4			326.5

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 39000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.6	39.1	51.4				94.1
40	1.1	15.1	147.4	7.4			171.0
60	0.1	3.5	96.8	23.3			123.7
65	0.2	2.0	121.0	50.6			173.7
70		1.5	107.0	37.6			146.1
75	0.2	1.8	73.3	18.6			93.9
80	0.4	0.4	32.8	3.4			37.0
85			6.2	0.1			6.4
90			3.0	0.2			3.2
95			0.4				0.4
100							
105							
110							
115							
120							
SUM	5.5	63.4	639.4	141.2			849.5

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 40000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	5.3	28.5	50.6	0.6			85.0
40	1.4	13.0	156.9	2.3			173.5
60		3.6	83.0	2.5			89.2
65		3.7	51.3	6.5			61.5
70		1.6	27.0	2.7			31.4
75		1.7	15.5	4.1			21.2
80		1.2	10.0	2.9			14.2
85		0.3	1.0	0.2			1.5
90			0.1				0.1
95							
100							
105							
110							
115							
120							
SUM	6.7	53.6	395.5	21.8			477.5



TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 40000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.3	11.8	23.0				36.1
40		7.7	46.5	2.5			56.7
60		1.2	28.4	1.2			30.8
65		0.7	39.3	3.8			43.8
70		1.8	41.2	6.9			49.8
75			23.8	4.7			28.5
80			10.6	1.1			11.7
85			2.1	1.4			3.5
90			1.4	0.2			1.6
95			0.4				0.4
100			0.5				0.5
105							
110							
115							
120							
SUM	1.3	23.2	217.2	21.8			263.4

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 40000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.2	5.1	13.4				18.8
40			53.9	8.2			62.1
60			37.8	12.2			50.0
65		3.0	63.8	36.7			103.4
70			83.9	40.1			124.0
75			33.5	26.6			60.2
80			16.7	13.2			29.9
85			2.5	0.2			2.7
90			1.6				1.6
95			0.6				0.6
100							
105							
110							
115							
120							
SUM	0.2	8.1	307.7	137.3			453.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 40000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	6.8	45.5	87.1	0.6			139.9
40	1.4	20.7	257.3	13.0			292.4
60		4.8	149.2	16.0			170.0
65		7.3	154.4	47.0			208.7
70		3.4	152.1	49.7			205.2
75		1.7	72.8	35.4			109.8
80		1.2	37.3	17.2			55.8
85		0.3	5.6	1.8			7.7
90			3.1	0.2			3.3
95			1.0				1.0
100			0.5				0.5
105							
110							
115							
120							
SUM	8.2	84.9	920.4	180.9			1194.3

TABLE IV - Concluded

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT						SUM, BY MISSION SEG.	SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	84.4	633.6	849.6	0.6			1568.2
40	13.3	191.9	1161.6	66.3			1433.2
60	2.7	58.1	773.9	93.0			927.6
65	2.2	48.6	869.3	213.0			1133.1
70	3.0	34.4	848.5	235.4			1121.3
75	1.7	28.0	786.6	242.4			1058.7
80	0.6	18.1	716.4	373.1			1108.1
85	1.3	8.6	798.6	437.5			1246.0
90	0.2	7.6	905.4	510.7			1423.9
95		2.8	524.0	236.2			762.9
100		1.8	207.8	86.9			296.5
105		0.1	45.1	28.1			73.2
110			7.2	45.0			52.2
115			0.8	3.2			4.1
120							
SUM	109.4	1033.6	8494.6	2571.5			12209.1

TABLE V. TIME FOR CYCLIC STEADY VERSUS COLLECTIVE  
STEADY BY MISSION SEGMENT, SAMPLE I

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG ASCENT

	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
10											
20											
30											
40							788.1	922.0	67.5		1777.6
50							1323.1				1323.1
60							88.9				88.9
70											
80											
90											
SLP						2200.2	922.0	67.5			3189.6

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG MANUVR

	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
10											
20											
30											
40							23.9	3.1			27.0
50							29.1				29.1
60											
70											
80											
90											
SLP						53.0	3.1				56.1

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG DESCNT

	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
10											
20											
30											
40							947.6	1103.5	62.9		2114.1
50							1357.8				1357.8
60							82.3				82.3
70											
80											
90											
SLP						2387.7	1103.5	62.9			3554.2

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG STEADY

	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
10											
20											
30					23.4	51.6	21.0	25.4	0.7		122.1
40			2.2	22.2	626.0	645.3	178.3	64.4	5.7		1548.2
50			4.5	118.9	724.7	831.9	207.6	63.5	6.7		1957.8
60				39.3	795.1	943.7	59.8	25.3			1463.2
70				9.5	186.8	54.5	18.7	0.6			310.5
80				7.1			0.2				7.3
90											
SLP		6.7	197.0	2356.1	2167.4	485.6	179.2	17.1			5409.1

TABLE V - Concluded

MINUTES FOR CYCLIC VS COLL BY MISSION SEG											SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
10											
20											
30					22.4	51.6	21.0	25.4	6.7		122.1
40			2.2	22.2	626.0	645.3	1937.9	2093.0	140.1		5466.9
50			4.5	118.9	724.7	831.9	2917.6	63.5	6.7		4667.9
60				25.2	752.1	543.7	231.1	25.3			1634.4
70				9.5	186.8	54.5	18.7	0.6			310.5
80				7.1			0.2				7.3
90											
SUM			6.7	197.0	2356.1	2167.4	5126.5	2207.8	147.5		12209.0

TABLE VI. TIME FOR  $C_T/\sigma$  VERSUS  $\mu$  BY RATE OF CLIMB AND MISSION SEGMENT, SAMPLE I

MINUTES FOR $C_T/S$ VS $\mu$ BY RATE OF CLIMB LESS, BY MISSION SEG. DESCNT								
LESS	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
0.0		0.1						0.1
0.05								
0.10		0.4	1.2					1.6
0.15		2.4	3.6					6.0
0.20	0.3	4.7	0.7					5.7
0.25		1.0						1.0
0.30								
SUM	0.3	8.6	5.5					14.4

MINUTES FOR $C_T/S$ VS $\mu$ BY RATE OF CLIMB LESS, BY MISSION SEG. SUM								
LESS	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
0.0		0.1						0.1
0.05								
0.10		0.4	1.2					1.6
0.15		2.4	3.6					6.0
0.20	0.3	4.7	0.7					5.7
0.25		1.0						1
0.30								
SUM	0.3	8.6	5.5					14.4

MINUTES FOR $C_T/S$ VS $\mu$ BY RATE OF CLIMB -2100, BY MISSION SEG. MANUVR								
LESS	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
0.0								
0.05								
0.10								
0.15			0.1					0.1
0.20								
0.25								
0.30								
SUM			0.1					0.1

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB -2100, BY MISSION SEG, DESCNT				
	LESS	C.06	0.09	C.12	0.15	C.18	0.21	SUM
LESS								
0.0								
0.05			C.2					C.2
0.10		1.0	2.2					3.2
0.15	C.2	8.0	7.8					16.1
0.20	C.4	16.7	1.4					18.5
0.25		3.2						3.2
0.30								
SLP	C.6	29.0	11.6					41.2

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB -2100, BY MISSION SEG.				SUP
	LESS	C.06	0.09	C.12	0.15	C.18	0.21	SUM
LESS								
0.0								
0.05			C.2					0.2
0.10		1.0	2.2					3.2
0.15	C.2	8.0	7.9					16.2
0.20	C.4	16.7	1.4					18.5
0.25		3.2						3.2
0.30								
SLP	C.6	29.0	11.7					41.3

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB -1800, BY MISSION SEG. DESCNT				
	LESS	C.06	0.09	C.12	0.15	C.18	0.21	SUM
LESS		C.1	C.4					0.5
0.0								
0.05		C.2	C.9					1.1
0.10	C.1	4.1	8.4					12.5
0.15	C.8	13.4	14.3					28.5
0.20	1.1	21.8	3.4					26.3
0.25	C.1	4.5						4.6
0.30								
SLP	2.1	44.0	27.3					73.4

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB -1800, BY MISSION SEG.				SUP
	LESS	C.06	0.09	C.12	0.15	C.18	C.21	SUM
LESS		C.1	C.4					0.5
0.0								
0.05		C.2	C.9					1.1
0.10	C.1	4.1	8.4					12.5
0.15	C.8	13.4	14.3					28.5
0.20	1.1	21.8	3.4					26.3
0.25	C.1	4.5						4.6
0.30								
SLP	2.1	44.0	27.3					73.4

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB -1500, BY MISSION SEG, ASCENT				
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
0.0								
0.05								
0.10	0.1						0.1	
0.15								
0.20								
0.25								
0.30								
SUM	0.1						0.1	

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB -1500, BY MISSION SEG, MANUVR				
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
0.0								
0.05								
0.10								
0.15	0.1						0.1	
0.20								
0.25								
0.30								
SUM	0.1						0.1	

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB -1500, BY MISSION SEG, DESCNT				
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	C.0	0.4	0.8					1.2
0.0	C.1	0.5	0.7					1.3
0.05	C.1	2.0	2.0					4.1
0.10	C.6	10.2	25.5					36.3
0.15	3.0	25.8	48.0					80.8
0.20	3.2	70.8	4.4					78.4
0.25		8.6	0.2					8.8
0.30								
SUM	7.1	122.2	91.7					210.9

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB -1500, BY MISSION SEG.				SUM
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.0	0.4	0.8					1.2
0.05	0.1	0.5	0.7					1.3
0.10	0.1	2.0	2.0					4.1
0.15	0.6	10.3	25.5					36.4
0.20	3.0	29.9	48.0					80.9
0.25	3.2	70.8	4.4					78.4
0.30		8.6	0.2					8.8
SUM	7.1	122.4	91.7					211.1

TABLE VI - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. MANUVR

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS								
0.0								
0.05								
0.10								
0.15			0.1					0.1
0.20		0.7						0.7
0.25		0.1						0.1
0.30								
SLM		0.8	0.1					0.9

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. DESCNT

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS		0.4	1.2					1.6
0.0		0.5	1.2					1.7
0.05	0.1	2.6	2.3					5.1
0.10	0.7	19.0	34.6	0.1				54.5
0.15	4.8	66.7	86.3	0.4				158.2
0.20	3.8	146.8	9.7					160.3
0.25		12.3						12.3
0.30								
SLM	9.5	248.4	135.2	0.5				393.6

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. STEADY

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS		0.1	0.1					0.3
0.0		0.0	0.0					0.1
0.05								
0.10								
0.15								
0.20								
0.25								
0.30								
SLM		0.2	0.2					0.4

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. SUM

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS		0.5	1.3					1.9
0.0		0.6	1.2					1.8
0.05	0.1	2.6	2.3					5.1
0.10	0.7	19.0	34.6	0.1				54.5
0.15	4.8	66.7	86.4	0.4				158.3
0.20	3.8	147.5	9.7					161.0
0.25		12.4						12.4
0.30								
SLM	9.5	249.4	135.5	0.5				394.9

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-900, BY MISSION SEG. ASCENT
	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM
LESS		C.4	C.4					0.8
0.0		C.2	C.3					0.5
0.05		C.1						0.1
0.10		C.3	C.1					C.4
0.15		C.3	C.2					0.5
0.20		C.7	C.3					1.0
0.25								
0.30								
SUM		2.0	1.3					3.3

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-900, BY MISSION SEG. MANUVR
	LESS	C.06	0.09	C.12	0.15	C.18	0.21	SUM
LESS								
0.0								
0.05								
0.10								
0.15		C.1						0.1
0.20		C.6						0.6
0.25								
0.30								
SUM		C.7						0.7

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-900, BY MISSION SEG. DESCNT
	LESS	C.06	0.09	C.12	0.15	C.18	0.21	SUM
LESS	C.4	3.2	4.9					8.6
0.0	C.4	2.0	2.2					4.6
0.05	1.4	10.1	14.3					25.7
0.10	8.8	43.5	76.6					129.0
0.15	12.0	122.1	114.7	0.5				249.4
0.20	10.2	187.0	7.7					204.8
0.25		11.0						11.0
0.30								
SUM	33.2	378.9	220.5	0.5				633.1

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-900, BY MISSION SEG. STEADY
	LESS	C.06	0.09	C.12	0.15	C.18	0.21	SUM
LESS	C.1	1.5	C.8					2.3
0.0	C.1	C.7	C.0					0.9
0.05								
0.10			C.2					C.2
0.15	C.1	2.7	2.0					4.8
0.20		4.4	C.2					4.6
0.25								
0.30								
SUM	C.3	9.2	3.2					12.8



TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			-900, BY MISSION SEG.	SUM
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS	C.5	5.1	6.1					11.7
0.0	C.5	3.0	2.6					6.0
0.05	1.4	10.2	14.3					25.8
0.10	8.8	47.8	76.9					129.6
0.15	12.1	125.2	116.9	0.5				254.7
0.20	10.2	192.7	8.2					211.1
0.25		11.0						11.0
0.30								
SUM	33.5	390.9	225.0	0.5				649.9

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			-600, BY MISSION SEG. ASCENT	SUM
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS	C.0	1.2	5.2					6.4
0.0	C.1	1.6	2.1					3.8
0.05	C.2	0.6	0.7					1.5
0.10		0.9	1.6					2.5
0.15		4.1	4.3					8.4
0.20	C.2	9.7	0.4					10.3
0.25		0.3						0.3
0.30								
SUM	C.5	18.5	14.3					33.3

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			-600, BY MISSION SEG. MANUVR	SUM
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS								
0.0								
0.05								
0.10		C.1						0.1
0.15		1.3	C.3					1.6
0.20		4.4						4.4
0.25		C.1						0.1
0.30								
SUM		5.8	C.3					6.1

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			-600, BY MISSION SEG. DESCNT	SUM
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS	3.6	14.7	9.5					29.7
0.0	1.9	14.0	9.1					25.0
0.05	7.1	36.8	33.6					77.5
0.10	12.1	72.6	100.7					185.3
0.15	15.4	156.8	153.3	0.3				329.8
0.20	13.2	245.7	13.0					271.9
0.25	C.1	9.6	C.2					9.9
0.30								
SUM	57.4	552.1	319.2	0.3				929.0

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-600, BY MISSION SEG, STEADY
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	1.5	10.2	2.3					14.0
0.0	1.1	5.6	0.9					7.5
0.05	0.2	0.3						0.4
0.10		1.2	5.9					7.1
0.15		13.1	30.6	0.3				44.1
0.20	0.4	73.3	2.2					75.9
0.25		2.3						2.3
0.30								
SUM	3.1	106.1	42.0	0.3				151.4

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-600, BY MISSION SEG, SUM
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	5.1	28.1	17.0					50.1
0.0	3.1	21.2	12.1					36.4
0.05	7.5	37.7	34.3					79.4
0.10	12.1	74.8	108.1					195.0
0.15	19.4	175.3	188.5	0.6				383.8
0.20	13.8	333.0	15.7					362.5
0.25	0.1	12.4	0.2					12.7
0.30								
SUM	61.0	682.4	375.8	0.6				1119.9

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-300, BY MISSION SEG, ASCENT
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	4.9	44.0	74.3					123.2
0.0	2.1	15.9	23.0					41.0
0.05	0.9	19.0	17.4					37.4
0.10	0.2	34.3	125.0	0.4				159.9
0.15	1.5	135.5	261.8	1.2				399.9
0.20	1.1	225.1	6.4					232.6
0.25		2.4	0.4					2.8
0.30								
SUM	10.7	476.2	508.4	1.6				996.9

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-300, BY MISSION SEG, MANUVR
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS								
0.0								
0.05								
0.10		0.1						0.1
0.15		6.7						6.7
0.20		35.0						35.0
0.25		0.5						0.5
0.30								
SUM		42.3						42.3

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-300, BY MISSION SEG. DESCNT
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	10.7	65.6	19.8					96.2
0.0	8.5	56.0	22.8					87.3
0.05	12.0	75.9	36.8					124.7
0.10	15.8	72.2	80.0					168.1
0.15	16.0	173.6	190.8	0.3				380.7
0.20	16.5	311.0	10.9					338.4
0.25	0.1	5.1						9.2
0.30								
SUM	79.7	763.5	361.1	0.3				1204.6

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-300, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	35.8	279.2	33.9					349.0
0.0	12.6	127.7	12.3					162.5
0.05	0.8	22.9	14.2					37.9
0.10	0.4	62.2	259.4	0.2				322.3
0.15	3.9	568.8	1270.2	8.0				1850.9
0.20	26.8	2202.0	36.7	1.6				2267.1
0.25		58.5	1.2					99.6
0.30								
SUM	80.2	3371.3	1627.9	9.8				5089.2

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-300, BY MISSION SEG. SUM
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	51.4	388.8	128.1					568.3
0.0	23.2	209.5	58.1					290.8
0.05	13.8	117.8	68.4					200.0
0.10	16.4	168.8	464.5	0.6				650.4
0.15	21.3	884.6	1722.8	9.5				2638.2
0.20	44.3	2773.2	54.0	1.6				2873.1
0.25	0.1	110.5	1.6					112.2
0.30								
SUM	170.6	4653.2	2497.4	11.7				7332.9

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				300, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	2.5	25.1	29.2					56.8
0.0	0.4	15.2	17.9					33.5
0.05	1.9	17.9	33.2					52.9
0.10	0.3	47.3	181.9	0.3				229.8
0.15	1.9	144.0	179.7	0.4				326.0
0.20	2.0	57.9	4.3					104.2
0.25		1.6	0.2					1.8
0.30								
SUM	8.9	345.0	446.4	0.7				805.0

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			300, BY MISSION SEG. MANUVR	
LESS	LESS	C.06	0.09	C.12	0.15	C.18	0.21	SUM
LESS								
0.0								
0.05								
0.10								
0.15		0.8	C.4					1.2
0.20		3.6	C.1					3.7
0.25		C.1						0.1
0.30								
SUM		4.5	0.5					5.0

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			300, BY MISSION SEG. DESCNT	
LESS	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM
LESS	1.0	1.7	1.7					4.4
0.0	1.5	4.7	3.1					9.3
0.05	C.4	2.0	1.3					3.6
0.10	0.7	2.9	1.8					5.4
0.15	1.1	5.4	6.5					13.0
0.20	1.0	5.5	C.6					11.0
0.25		C.4	C.1					0.5
0.30								
SUM	5.7	26.4	15.0					47.2

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			300, BY MISSION SEG. STEADY	
LESS	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM
LESS	C.9	7.5	1.4					9.8
0.0	C.4	3.0	1.0					4.5
0.05		C.5						0.5
0.10	0.2	1.6	9.8					11.6
0.15	C.2	19.6	29.1	0.2				49.2
0.20	C.8	59.2	1.0					61.0
0.25		1.9	C.1					2.0
0.30								
SUM	2.5	93.4	42.5	0.2				138.6

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			300, BY MISSION SEG.		SUM
LESS	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM	
LESS	4.3	24.3	32.3					70.9	
0.0	2.3	22.9	22.1					47.3	
0.05	2.3	20.3	34.4					57.0	
0.10	1.3	51.8	193.4	0.3				246.8	
0.15	3.2	169.8	215.7	0.6				389.3	
0.20	3.8	170.2	6.0					180.0	
0.25		4.0	C.4					4.4	
0.30									
SUM	17.2	473.3	504.4	0.9				995.8	

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			60C, BY MISSION SEG. ASCENT	
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	1.3	14.7	9.2					25.1
0.0	0.5	8.7	7.6					16.9
0.05	1.8	17.0	24.4					43.3
0.10	2.9	57.8	164.1					224.7
0.15	4.4	131.9	113.1	0.1				249.5
0.20	1.1	35.0	1.9					38.0
0.25		0.8						0.8
0.30								
SUM	12.0	266.0	320.2	0.1				598.3

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			60C, BY MISSION SEG. DESCNT	
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.1	0.5	0.7					1.4
0.0	0.3	0.6	0.8					1.6
0.05		0.1	0.1					0.2
0.10		0.4	0.4					0.8
0.15	0.1	0.8	0.3					1.2
0.20		1.6						1.6
0.25								
0.30								
SUM	0.5	3.9	2.3					6.8

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			60C, BY MISSION SEG. STEADY	
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.3	1.9	0.1					2.3
0.0	0.3	1.3	0.0					1.7
0.05	0.1	0.2						0.3
0.10		0.1	0.6					0.7
0.15	0.1	2.8	3.2					6.1
0.20		5.4	0.2					5.6
0.25								
0.30								
SUM	0.8	11.7	4.1					16.6

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			60C, BY MISSION SEG.		SUM
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS	1.7	17.0	10.0					28.7	
0.0	1.1	10.6	8.5					20.2	
0.05	1.9	17.3	24.5					43.8	
0.10	2.9	58.3	165.1					226.2	
0.15	4.6	135.5	116.6	0.1				256.8	
0.20	1.1	42.0	2.1					45.1	
0.25		0.8						0.8	
0.30									
SUM	13.3	281.5	326.7	0.1				621.7	

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			90C, BY MISSION SEG. ASCENT	
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS	1.3	5.2	1.0					7.4
0.0	1.0	6.7	1.8					9.4
0.05	1.2	12.7	8.0					21.8
0.10	1.4	65.3	72.2					138.9
0.15	4.2	130.5	45.3	0.1				180.1
0.20	C.5	23.3	C.9					24.8
0.25		C.2						0.2
0.30								
SUM	9.5	243.9	129.1	0.1				382.6

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			90C, BY MISSION SEG. MANUVR	
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS								
0.0								
0.05								
0.10								
0.15		C.1						0.1
0.20		C.4						0.4
0.25								
0.30								
SUM		C.5						0.5

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			90C, BY MISSION SEG. STEADY	
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS								
0.0								
0.05								
0.10								
0.15								
0.20	C.1							C.1
0.25								
0.30								
SUM	C.1							C.1

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			90C, BY MISSION SEG.		SUM
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM	
LESS	1.3	5.2	1.0					7.4	
0.0	1.0	6.7	1.8					9.4	
0.05	1.2	12.7	8.0					21.8	
0.10	1.4	65.3	72.2					138.9	
0.15	4.2	130.6	45.3	0.1				180.2	
0.20	C.6	23.7	C.9					25.3	
0.25		C.2						0.2	
0.30									
SUM	9.6	244.4	129.1	0.1				383.2	

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			1200, BY MISSION SEG. ASCENT	
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS	C.7	4.9	1.1					6.7
0.0	C.7	4.7	C.9					6.4
0.05	1.1	10.1	1.6					12.8
0.10	2.3	63.6	19.1					85.0
0.15	1.7	71.8	12.5					85.9
0.20		5.0	C.3					5.3
0.25								
0.30								
SUM	6.6	160.2	35.5					202.3

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			1200, BY MISSION SEG. MANUVR	
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS								
0.0								
0.05								
0.10								
0.15			C.1					C.1
0.20		C.3						C.3
0.25								
0.30								
SUM		C.3	C.1					0.4

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			1200, BY MISSION SEG. SUM	
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS	C.7	4.9	1.1					6.7
0.0	C.7	4.7	C.9					6.4
0.05	1.1	10.1	1.6					12.8
0.10	2.3	63.6	19.1					85.0
0.15	1.7	71.8	12.6					86.0
0.20		5.3	C.3					5.6
0.25								
0.30								
SUM	6.6	160.5	35.6					202.7

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			1500, BY MISSION SEG. ASCENT	
	LESS	C.06	C.09	C.12	C.15	C.18	C.21	SUM
LESS	C.6	3.7	C.3					4.6
0.0	C.5	2.1	C.2					2.8
0.05	2.8	7.1	C.4					10.3
0.10	2.8	24.8	3.9					31.5
0.15	C.8	33.9	2.3					37.0
0.20		1.8						1.8
0.25								
0.30								
SUM	7.5	73.3	7.1					87.9

TABLE VI - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			1500, BY MISSION SEG.	SUM
	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM
LESS	C.6	3.7	0.3					4.6
0.0	C.5	2.1	0.2					2.8
0.05	2.8	7.1	0.4					10.3
0.10	2.8	24.8	3.9					31.5
0.15	C.8	33.9	2.3					37.0
0.20		1.8						1.8
0.25								
0.30								
SUM	7.5	73.3	7.1					87.9

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			1800, BY MISSION SEG. ASCENT	
	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM
LESS	C.5	C.8						1.3
0.0	C.3	1.9						2.2
0.05	C.4	5.3	C.1					5.7
0.10	1.2	17.5	2.0					20.7
0.15	C.4	15.0	1.1					16.5
0.20		1.2	C.3					1.5
0.25								
0.30								
SUM	2.9	41.6	3.5					48.0

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			1800, BY MISSION SEG.	SUM
	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM
LESS	C.5	0.8						1.3
0.0	C.3	1.9						2.2
0.05	C.4	5.3	C.1					5.7
0.10	1.2	17.5	2.0					20.7
0.15	C.4	15.0	1.1					16.5
0.20		1.2	C.3					1.5
0.25								
0.30								
SUM	2.9	41.6	3.5					48.0

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			2100, BY MISSION SEG. ASCENT	
	LESS	C.06	0.09	C.12	0.15	0.18	C.21	SUM
LESS	C.4	C.8						1.2
0.0	C.1	1.1	C.1					1.3
0.05	C.6	2.7	C.1					3.4
0.10	2.1	14.7	C.9					17.7
0.15	C.3	7.3	C.3					7.9
0.20		C.2	C.3					C.5
0.25								
0.30								
SUM	3.5	26.9	1.6					32.0



TABLE VI - Concluded

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			210C, BY MISSION SEG.	SUM
	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM
LESS	C.4	C.8						1.2
0.0	C.1	1.1	C.1					1.3
0.05	C.6	2.7	C.1					3.4
0.10	2.1	14.7	0.9					17.7
0.15	C.3	7.3	C.3					7.9
0.20		C.2	C.3					0.5
0.25								
0.30								
SLP	3.5	26.9	1.6					32.0

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			SUP, BY MISSION SEG.	SUM
	LESS	C.06	0.09	C.12	0.15	0.18	0.21	SUM
LESS	66.6	489.8	198.2					754.6
0.0	33.0	284.9	108.2					426.1
0.05	33.0	246.0	191.5					470.5
0.10	52.7	618.2	1178.0	1.0				1850.0
0.15	76.8	1869.4	2582.2	11.8				4540.3
0.20	82.7	3804.6	107.3	1.6				3996.3
0.25	0.3	168.7	2.4					171.4
0.30								
SLP	345.2	7481.6	4367.9	14.4				12209.1

TABLE VII. TIME FOR ENGINE TORQUE VERSUS AIRSPEED  
BY WEIGHT AND ALTITUDE, SAMPLE I

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT														LESS.	BY ALTITUDE			2000			
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM							
	0.3	0.2		0.2										0.8							
40	0.5													0.5							
60																					
65	0.4													0.4							
70	0.1													0.1							
75	0.6			0.2										0.8							
80		0.6		0.3										0.9							
85			0.3	2.7										3.0							
90			0.7	5.8										6.5							
95				1.2										1.2							
100				0.2										0.2							
105																					
110																					
115																					
120																					
SUM	1.9	0.8	1.0	10.7										14.4							

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT LESS, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1	0.7										0.8
40		0.5												0.5
60														
65			0.4											0.4
70			0.1											0.1
75			0.6	0.2										0.8
80			0.6	0.3										0.9
85			0.3	2.7										3.0
90			0.4	6.1										6.5
95			0.3	0.9										1.2
100				0.2										0.2
105														
110														
115														
120														
SUM		0.5	2.7	11.2										14.4

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT LESS, BY ALTITUDE SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.2			0.2										0.8
40	0.5													0.5
60														
65	0.4													0.4
70	0.1													0.1
75	0.6			0.2										0.8
80		0.6		0.3										0.9
85			0.3	2.7										3.0
90			0.7	5.8										6.5
95				1.2										1.2
100				0.2										0.2
105														
110														
115														
120														
SUM	1.9	0.8	1.0	10.7										14.4

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT LESS, BY ALTITUDE SUP														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40		0.5	0.1	0.7										0.8
60														0.5
65			0.4											0.4
70			0.1											0.1
75			0.6	0.2										0.8
80			0.6	0.3										0.9
85			0.3	2.7										3.0
90			0.4	6.1										6.5
95			0.3	0.9										1.2
100				0.2										0.2
105														
110														
115														
120														
SUP		0.5	2.7	11.2										14.4

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 21000, BY ALTITUDE LESS														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	0.3	0.2	0.1	0.2										0.5
60														0.3
65	0.2													0.2
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUP	0.5	0.2	0.1	0.2										1.0

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 21000, BY ALTITUDE LESS														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40			0.2	0.1	0.2									0.5
60			0.3											0.3
65			0.2											0.2
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUP			0.7	0.1	0.2									1.0

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2100C, BY ALTITUDE 100C														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	2.7	2.4	4.9	3.0	4.9	0.9	0.5	0.9		0.1				20.2
40	0.8	1.3	1.2	0.4		0.2	0.2							4.2
60	0.4	0.1	0.1	0.2										0.8
65	0.3	0.1												0.4
70	0.4	0.1												0.5
75	0.3	0.1												0.4
80		0.1												0.1
85		0.5												0.5
90			0.8											0.8
95			0.5											0.5
100														
105														
110														
115														
120														
SUM	5.0	4.6	7.4	3.6	4.9	1.1	0.7	0.9		0.1				28.3

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2100C, BY ALTITUDE 100C														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	2.8	2.8	7.4	5.0	2.0	0.1								20.2
40	2.5	0.9	0.4		0.4									4.2
60	0.6	0.2	0.0											0.8
65	0.2	0.3												0.4
70	0.1	0.2	0.2											0.5
75		0.1	0.3											0.4
80		0.1												0.1
85		0.1	0.5											0.5
90		0.1		0.7										0.8
95				0.5										0.5
100														
105														
110														
115														
120														
SUM	6.1	4.7	9.1	6.2	2.5	0.1								28.3

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2100C, BY ALTITUDE 200C														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.2	1.7	2.2	6.8	9.4	2.6	1.1	0.6						24.7
40	3.1	1.6	2.4	3.6	3.3	3.5	0.4	0.1						18.0
60	1.0	2.0	0.2	1.0	2.0	1.1	0.2							7.6
65	0.7	1.9	0.1	1.3	2.1	0.4	1.1	0.1						7.7
70	1.4	0.7	2.2	3.1	1.6	0.1	0.3							9.3
75	3.7	1.0	2.4	4.9	3.7	0.5	0.2							18.5
80	4.1	3.7	5.5	8.6	2.6	0.1	0.2							24.6
85	2.8	9.9	6.0	15.1	5.5	1.7	0.1							41.2
90	9.6	9.0	7.8	22.6	4.7	1.5	0.3							55.5
95	3.4	2.0	3.6	5.0	7.6	2.5	0.2							24.2
100	0.4	1.6	2.7	5.2	3.7	0.3								13.9
105		0.5	1.0	2.2	3.3									7.0
110		0.4	0.1	0.3	1.3									2.1
115		0.1		0.2										0.3
120														
SUM	30.5	36.1	36.3	81.8	90.7	14.3	4.1	0.8						254.6

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2100C.								BY ALTITUDE		200C				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	3.0	1.8	4.4	7.7	4.2	2.4	0.4	0.7						24.7
40	5.5	4.0	1.0	1.6	4.9	0.4	0.6							18.0
60	1.6	1.3	0.2	1.7	1.9	0.2	0.4	0.2						7.6
65	2.0	0.7	0.8	0.9	2.0	0.3	1.0							7.7
70	2.2	1.3	1.4	2.0	1.5		0.1							9.3
75	2.4	5.6	1.9	5.0	3.0	0.2	0.3							18.5
80	2.9	2.6	9.1	7.8	1.9	0.1	0.2							24.6
85	5.6	3.7	12.8	12.6	4.3	1.0	0.5							41.2
90	9.4	5.0	16.6	17.5	4.1	1.3	1.7							55.5
95	3.2	2.7	4.3	3.0	0.5	1.1	1.4							24.2
100	0.7	1.9	3.6	3.4	4.0	0.3								13.9
105	0.9	0.7	0.9	4.5										7.0
110	0.1	0.1	0.4	1.5										2.1
115		0.2		0.1										0.3
120														
SUM	39.5	31.6	57.4	70.0	40.4	8.1	6.7	0.9						254.6

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2100C.								BY ALTITUDE		500C				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.1										0.1
40				0.5										0.5
60						0.2								0.4
65			0.2											0.4
70			0.4	0.1										0.5
75				0.7	0.2									0.9
80		0.2	1.6	2.3	0.5	0.2								4.8
85	0.2		3.9	8.1	7.2									14.4
90	0.2	0.1	3.8	7.0	2.4	0.1								13.6
95		0.7	2.6	2.5	0.6	0.0								6.6
100		0.2		0.6	4.7	0.0								6.3
105			0.2	0.1	1.4	1.0								2.7
110		0.5	0.6	0.2	0.2	0.4								1.8
115			0.1											0.1
120														
SUM	0.4	1.7	13.5	22.2	12.1	2.8								52.7

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2100C.								BY ALTITUDE		500C				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					0.1									0.1
40				0.5										0.5
60				0.2										0.4
65				0.5			0.2							0.5
70														
75			0.5	0.4										0.9
80			1.4	2.5	0.6		0.2							4.8
85		0.3	4.0	7.3	2.8									14.4
90	0.4	0.2	2.0	8.9	1.6	0.4	0.1							13.6
95		0.1	1.1	4.7	0.1	0.5	0.0							6.6
100		0.2		0.5	1.5	3.8	0.3							6.3
105			0.0	0.2	0.2	2.3								2.7
110			0.5	0.5	0.2	0.5								1.8
115			0.1											0.1
120														
SUM	0.4	0.8	9.7	26.2	7.1	7.6	0.9							52.7

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 21000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	2.9	4.3	7.2	10.0	14.3	3.5	1.5	1.5		0.1				45.3
40	4.2	3.0	3.6	4.1	3.3	3.7	0.6	0.1						22.6
60	1.4	2.1	0.3	1.7	2.0	1.1	0.2							8.9
65	1.3	2.0	0.3	1.3	2.1	0.7	1.1	0.1						8.8
70	1.9	0.8	2.6	3.1	1.6	0.1	0.3							10.3
75	4.1	1.1	2.4	7.6	3.9	0.5	0.2							19.7
80	4.1	3.9	7.1	10.9	3.1	0.3	0.2							29.5
85	3.0	10.4	10.0	23.2	7.7	1.7	0.1							56.1
90	9.8	9.1	12.3	29.5	7.1	1.6	0.3							69.8
95	3.4	2.7	6.7	7.5	8.2	2.5	0.2							31.3
100	0.4	1.8	2.7	5.9	8.3	1.1								20.2
105		0.5	1.2	2.3	4.7	1.0								9.7
110		0.8	0.7	3.5	1.5	0.4								3.9
115		0.1	0.1	0.2										0.4
120														
SUP	34.5	42.6	57.3	107.4	67.7	18.2	4.8	1.7		0.1				336.6

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 21000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	5.8	4.7	12.0	12.8	6.5	2.5	0.4	0.7						45.3
40	7.9	5.0	1.6	1.6	5.4	0.4	0.6							22.6
60	2.2	1.4	0.2	2.3	1.9	0.2	0.4	0.2						8.9
65	2.2	0.7	1.4	1.1	2.0	0.3	1.2							8.8
70	2.3	1.4	1.7	3.3	1.4		0.1							10.3
75	2.4	5.6	2.8	5.4	3.0	0.2	0.3							19.7
80	2.9	2.7	10.5	10.3	2.6	0.1	0.4							29.5
85	5.6	4.0	17.2	19.9	7.1	1.8	0.5							56.1
90	9.8	5.2	18.6	27.1	5.7	1.6	1.8							69.8
95	3.2	2.8	5.4	8.1	8.6	1.7	1.4							31.3
100	0.7	2.1	3.6	3.9	5.5	4.1	0.3							20.2
105	0.9	0.7	0.9	4.6	0.2	2.3								9.7
110	0.1	0.1	0.9	2.0	0.2	0.5								3.9
115		0.2	0.1	0.1										0.4
120														
SUP	46.0	36.7	76.9	102.5	50.2	15.8	7.4	0.9						336.6

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 23000,								BY ALTITUDE		LESS				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.6	2.2	0.9	2.4	0.6	1.2	0.1							9.1
40	1.1	0.3	0.7	0.1										2.2
60														
65	0.3													0.3
70	0.1													0.1
75	0.1													0.1
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUP	3.1	2.5	1.6	2.5	0.6	1.2	0.1							11.6

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 23000.													BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
40	2.1	0.8	4.8	0.9	0.4									9.1		
60	0.1	0.9	0.8	0.4										2.2		
65			0.3											0.3		
70			0.1											0.1		
75			0.1											0.1		
80																
85																
90																
95																
100																
105																
110																
115																
120																
SUM	2.2	1.7	6.0	1.3	0.4									11.6		

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 23000.													BY ALTITUDE		1000	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
40	0.4	0.9	12.0	21.1	22.7	23.1	2.0	1.3	0.2					97.5		
60	0.1	4.7	5.1	3.8	2.7	3.2	0.4	0.1	0.2					28.1		
65	2.6	1.1	2.6	1.0	0.5	0.4		0.5						8.7		
70	1.4	0.9	1.5	1.1	1.2	0.1								6.2		
75	0.9	0.9	2.8	1.8	0.3	0.2								7.0		
80	1.8	0.4	0.9	1.6	0.3	0.2								5.2		
85	1.8	0.5	0.8	0.5	0.1	0.1								3.9		
90	0.5	1.9	0.3	0.1										2.7		
95	0.2	0.2	0.2	0.1										0.7		
100		0.0	0.4											0.4		
105			0.1											0.1		
110			0.1											0.1		
115																
120																
SUM	25.4	17.4	26.8	31.2	27.8	27.4	2.3	1.8	0.2					160.7		

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 23000.													BY ALTITUDE		1000	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
40	7.6	7.7	23.1	37.6	17.2	2.3	1.3	0.7						97.5		
60	0.4	0.1	7.2	4.2	4.7	0.2	0.3							28.1		
65	2.2	2.5	1.2	1.1	1.2			0.5						8.7		
70	1.4	1.8	1.4	0.7	0.9	0.1								6.2		
75	1.1	3.0	1.0	1.2	0.4									7.0		
80	1.5	0.6	1.8	0.8	0.4	0.2								5.2		
85	0.6	0.2	1.7	1.2	0.2									3.9		
90	0.1		1.1	1.3	0.2									2.7		
95	0.0	0.1	0.4		0.2									0.7		
100	0.0	0.2		0.2	0.2									0.4		
105				0.1										0.1		
110				0.1										0.1		
115																
120																
SUM	15.9	22.2	38.7	48.6	25.6	2.9	1.6	1.2						160.7		

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2300C,								BY ALTITUDE		200C				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	5.6	10.3	19.3	39.2	44.4	24.0	11.1	4.6	0.8					159.4
40	9.6	9.7	10.5	21.4	15.6	18.8	8.2	2.4	0.5					96.7
60	5.9	4.8	4.4	5.7	11.5	6.4	5.1							43.9
65	5.2	5.1	4.5	12.3	13.8	6.8	2.4							50.2
70	7.8	7.3	10.5	20.3	14.8	10.4	4.5							75.1
75	8.0	8.2	23.0	27.6	17.1	5.8	1.6							91.2
80	10.6	9.8	33.9	52.0	24.2	7.9	2.8							141.2
85	12.4	15.3	28.8	75.8	47.8	5.0	2.8							187.8
90	5.3	15.8	32.7	85.6	88.9	7.8	0.4							237.4
95	2.4	7.3	21.7	43.9	63.8	5.8	0.7							145.5
100	1.4	2.8	6.4	16.2	19.3	1.2								47.3
105		0.2	1.1	5.7	2.1									7.1
110		0.1	0.8	0.6	1.6									3.1
115				0.2										0.2
120														
SUP	74.2	96.8	198.4	474.4	364.8	99.8	39.2	7.0	1.4					1286.0

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2300C,								BY ALTITUDE		200C				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	12.4	19.1	29.4	47.3	31.5	11.5	11.4	0.9						159.4
40	16.6	13.0	11.4	11.1	17.9	17.5	8.1	1.1						96.7
60	5.6	7.3	5.5	3.8	7.8	8.6	4.9	0.5						43.9
65	9.7	6.3	10.5	5.5	11.4	8.2	2.2	0.3						50.2
70	8.3	9.2	18.5	9.8	9.8	14.9	4.0	0.5						75.1
75	9.3	14.7	24.0	18.9	13.5	9.0	1.8							91.2
80	9.9	20.2	36.2	30.8	27.1	11.2	2.8							141.2
85	9.1	19.7	52.1	45.4	52.2	11.3	2.0							187.8
90	6.8	19.1	36.9	54.0	70.0	14.2	0.4							237.4
95	2.9	7.5	28.8	44.2	50.5	10.8	0.7							145.5
100	2.8	3.5	7.6	22.3	8.7	2.3								47.3
105	0.3	1.2	1.1	2.5	1.2	0.7								7.1
110			0.3	0.4	1.1	1.3								3.1
115					0.2									0.2
120														
SUM	89.6	128.9	265.3	336.0	302.9	121.6	38.3	3.3						1286.0

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2300C,								BY ALTITUDE		500C				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40	C.7		C.6	5.1	1.2	C.5	0.5							8.7
60	C.5	0.8	5.3	3.7	1.7	C.5	2.1	0.1						12.6
65	C.5	1.4	6.6	9.3	4.3	0.6	0.3							22.9
70		0.2	15.8	9.3	9.0	0.5	0.1	0.1						31.0
75			8.5	35.2	7.9	0.8								52.4
80		0.6	14.3	46.3	24.3	4.0	0.5							92.0
85		2.1	14.3	51.9	25.9	2.1	0.3							96.6
90		C.8	12.5	64.2	26.9	4.0	2.1							110.5
95		1.8	2.5	27.8	21.6	2.3								56.1
100		C.2	C.6	9.4	8.1	6.6	C.3							25.2
105		C.2	C.7	0.4	C.4	C.1								1.8
110					C.1									0.1
115														
120														
SUP	1.7	8.1	83.7	262.6	127.3	21.9	4.2	0.2						509.7



TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2300C.								BY ALTITUDE		5000				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS														8.7
40		0.5	4.7	1.6	0.7	0.9	0.3							12.6
60		0.6	7.0	3.2	0.8	0.5	0.4							22.9
65		0.2	6.5	11.8	2.7	1.3	0.9							31.0
70		0.2	6.0	19.5	3.5	1.6	0.2							52.4
75	0.4	0.9	12.9	31.3	5.6	1.1	0.3							92.0
80	0.7	1.8	27.6	26.6	27.5	6.5	1.2							96.6
85	0.5	2.1	21.5	38.0	28.7	5.4	0.3							110.5
90		0.9	14.9	38.5	35.2	21.0								56.1
95	0.3	0.8	6.2	10.9	25.5	12.4								25.2
100		0.8	2.0	1.5	14.1	6.8								1.8
105		0.1	0.1	1.2		0.4								0.1
110				0.1										
115														
120														
SUP	2.0	8.8	109.5	184.2	144.2	57.8	3.2							509.7

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2300C.								BY ALTITUDE		SUP				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	15.7	19.4	32.3	62.7	67.7	48.3	13.1	5.8	1.3					265.9
40	19.6	14.7	16.8	30.4	19.5	22.5	9.1	2.5	0.6					135.7
60	9.0	6.7	12.2	10.4	13.7	7.3	5.2	0.6						65.2
65	7.3	7.4	12.6	22.7	19.3	7.5	2.7							79.5
70	8.7	8.4	29.1	31.4	20.1	11.2	4.1	0.1						113.1
75	9.9	8.6	32.3	64.4	25.3	6.7	1.6							148.8
80	12.5	10.9	51.0	98.8	48.5	12.1	3.3							237.1
85	12.8	19.2	43.4	127.8	73.7	7.8	3.2							287.1
90	5.5	16.8	46.4	149.9	115.7	11.7	2.5							348.6
95	2.4	9.1	24.6	71.7	85.4	8.1	0.7							202.0
100	1.4	3.0	7.1	25.6	27.4	7.8	0.3							72.6
105		0.4	1.8	4.1	2.5	0.1								8.9
110		0.1	0.8	0.6	1.7									3.2
115				0.2										0.2
120														
SUP	104.8	124.7	310.6	700.7	520.5	150.3	45.8	9.1	1.6					1968.0

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2300C.								BY ALTITUDE		SUP				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	22.0	23.6	57.3	85.9	49.1	13.8	12.7	1.6						265.9
40	22.1	20.5	24.1	17.2	23.3	16.7	8.7	1.1						135.7
60	7.8	10.3	13.7	8.1	9.9	9.2	5.3	1.0						65.2
65	7.1	8.3	18.6	18.0	14.9	9.5	2.7	0.3						79.5
70	9.3	12.5	25.5	30.6	13.9	16.5	4.3	0.5						113.1
75	11.1	16.1	38.8	51.0	19.4	10.3	2.1							148.8
80	11.2	22.3	68.5	58.5	54.9	17.7	4.0							237.1
85	9.7	17.8	74.6	84.7	81.1	16.8	2.3							287.1
90	6.9	16.1	52.1	132.5	105.4	35.2	0.4							348.6
95	3.3	8.5	35.0	55.3	76.0	23.2	0.7							202.0
100	2.8	4.3	9.7	23.9	22.8	9.1								72.6
105	0.3	1.3	1.2	3.8	1.2	1.1								8.9
110			0.3	0.5	1.1	1.3								3.2
115					0.2									0.2
120														
SUP	113.7	161.6	419.5	570.1	473.2	182.4	43.2	4.5						1968.0

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE LESS														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.9	1.5	1.3	5.3	3.5	6.5	0.4	0.5						19.9
60	0.1	1.1	0.8				0.1							2.0
65	0.2						0.1							0.2
70	0.4	0.4												0.7
75		0.4												0.4
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUP	1.5	3.3	2.0	5.3	3.5	6.5	0.5	0.5						23.3

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE LESS														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.6	3.1	4.4	5.3	5.5	0.9	0.1	0.1						19.9
60	0.3	1.1	0.5		0.1									2.0
65			0.2		0.1									0.2
70			0.7											0.7
75			0.4											0.4
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUP	0.9	4.2	6.3	5.3	5.6	0.9	0.1	0.1						23.3

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE 1000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	11.4	10.0	17.3	19.7	44.2	29.5	8.9	10.6	2.7	0.6	0.1			175.0
40	5.6	7.4	3.4	8.7	4.7	2.9	1.1	0.2						33.9
60	2.0	2.3	2.8	1.9	1.0	2.1	0.1							12.2
65	0.9	0.9	2.1	2.1	0.3	0.7	0.0							7.1
70	0.9	1.7	1.7	1.9	0.6	0.2	0.4							7.2
75	0.9	1.6	1.1	0.8	1.0	0.1	0.3							5.8
80	0.5	1.8	1.6	0.3	0.3		0.1							4.6
85	0.0	0.5	0.3	0.2	0.1									1.3
90		0.9	0.3	0.4	0.1									1.7
95														
100		0.2		0.2										0.4
105														
110														
115														
120														
SUP	22.2	27.3	30.6	56.0	52.5	35.6	10.9	10.8	2.7	0.6	0.1			249.3

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2500G,								BY ALTITUDE		1000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	10.3	13.9	23.1	37.6	47.5	14.5	5.0	1.3	1.4	0.5				175.0
40	8.1	7.9	4.3	6.5	4.4	2.6	0.2							33.9
60	2.4	2.5	1.9	1.8	3.2	0.2	0.1							12.2
65	1.7	1.4	1.5	1.5	0.1	0.8								7.1
70	1.7	1.5	2.2	0.9	0.7	0.2								7.2
75	1.3	1.3	0.6	1.9	0.5	0.2								5.8
80	0.3	1.4	2.0	0.5	0.5	0.0								4.6
85	0.2	0.5	0.4			0.2								1.3
90	0.5	0.7	0.3	0.1	0.1									1.7
95														
100		0.2	0.2											0.4
105														
110														
115														
120														
SUM	26.5	31.2	36.6	70.8	56.9	18.8	5.3	1.3	1.4	0.5				249.3

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2500G.														BY ALTITUDE		2000				SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120								
LESS	9.1	13.2	17.5	39.9	55.0	38.8	17.7	6.2	0.6	0.6				210.6						
40	6.7	17.6	21.1	25.4	39.5	41.0	11.7	1.4	0.3					164.6						
60	7.4	6.2	4.6	18.8	25.1	12.9	5.2	1.2	0.1					81.5						
65	5.2	5.5	9.8	14.2	17.9	13.4	5.5	1.0						72.5						
70	6.1	12.3	10.4	21.4	27.5	15.6	3.5	0.5						97.3						
75	9.4	8.4	21.7	52.8	33.4	15.1	2.5	0.1						143.4						
80	12.2	16.6	35.4	82.6	55.8	10.9	1.0							214.4						
85	18.1	15.7	43.4	108.7	81.4	8.0	0.5							275.8						
90	17.3	8.9	35.6	125.6	87.4	10.7	1.4							287.4						
95	5.5	7.3	28.3	68.8	59.0	6.4	1.0							176.4						
100	0.9	2.9	19.6	21.9	27.7	5.1	0.6							77.7						
105	0.2	1.5	2.6	3.7	3.7	0.4								12.1						
110		0.8	0.4	0.3	0.4									1.8						
115		0.1	0.1	0.1										0.3						
120																				
SUM	98.0	117.0	249.5	604.3	513.8	178.3	51.0	16.5	1.0	0.6				1823.9						

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2500G.								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	18.0	22.6	31.9	58.1	52.3	24.7	6.6	3.9	0.4					218.6
40	25.7	16.0	11.2	19.2	44.2	37.8	9.6	0.9						164.6
60	8.9	7.7	4.4	13.2	27.5	11.8	5.2	2.8						81.5
65	10.1	9.0	10.4	5.8	13.7	12.4	5.4	0.6						72.5
70	16.9	14.1	14.8	17.1	15.0	19.8	4.2	0.4						97.3
75	14.0	15.7	21.1	49.3	19.1	21.2	2.9	0.1						143.4
80	16.7	19.5	54.5	64.7	37.0	20.4	1.6							214.4
85	25.1	18.5	52.5	81.1	76.3	20.6	1.7							275.8
90	22.6	13.9	42.1	105.4	78.5	23.3	1.6							287.4
95	7.9	7.8	35.6	43.2	55.9	24.3	1.6							176.4
100	2.3	3.2	14.8	20.3	27.6	8.2	1.3							77.7
105	0.5	1.7	0.9	3.5	4.0	1.5								12.1
110	0.0	0.4	0.5	0.8	0.1									1.8
115		0.0	0.1	0.2										0.3
120														
SUM	162.8	151.0	294.7	482.2	456.2	226.1	41.7	8.9	0.4					1823.9

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2500C,								BY ALTITUDE		500C				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40		0.2	0.4	0.9	1.0	1.1	0.4							4.0
60		0.1	1.6	0.5	0.9	1.5	0.6							5.2
65		0.5	6.4	4.4	1.4	1.1	0.7							14.5
70	0.2	1.1	13.2	9.8	7.2	1.3	0.4							33.2
75		1.4	17.0	25.5	9.4	1.3		0.3						54.9
80	0.3	1.0	14.0	64.6	33.8	3.3	0.1	0.9						118.1
85	2.9	1.6	32.8	111.8	49.4	3.1	0.1	0.0						201.7
90	6.4	5.4	21.7	164.5	66.6	1.8	0.0							266.3
95		0.6	3.2	41.4	43.3	2.4	1.0	0.1						92.0
100		0.1	1.0	21.1	12.4	0.2								34.8
105			0.5	9.0	2.5									12.0
110			0.6	1.2		12.8								14.6
115				0.0		1.7								1.8
120														
SLP	9.8	12.0	112.3	454.8	227.9	31.7	3.3	1.4						853.1

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2500C, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40		0.4	0.7	0.4	1.3	1.1								4.0
60		0.4	1.2	0.9	1.1	0.5	1.0							5.2
65		1.5	6.8	3.3	0.8	1.1	1.0							14.5
70	0.1	2.9	14.3	7.4	5.5	2.1	0.8							33.2
75	1.4	1.4	18.9	24.0	7.2	1.6	0.3	0.1						54.9
80	0.7	3.6	20.2	52.6	34.3	4.7								118.1
85	3.6	1.5	44.9	85.4	61.6	4.7		0.0						201.7
90	6.4	2.2	43.2	128.3	80.7	5.6	0.0							266.3
95	0.5	0.2	7.7	23.0	45.8	12.1	2.7							92.0
100		0.3	1.0	6.4	21.9	4.9	0.3							34.8
105			0.2	2.7	7.3	1.8								12.0
110			0.1	1.4		10.9	1.9							14.6
115					0.0	1.5	0.3							1.8
120														
SLP	12.6	14.4	159.2	335.9	269.8	52.6	8.3	0.2						853.1

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2500C, BY ALTITUDE SUP														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	21.4	24.7	36.1	105.0	102.7	74.8	27.0	17.2	3.3	1.2	0.1			413.6
40	12.3	26.3	25.7	35.1	45.1	44.9	13.2	1.6	0.3					204.5
60	9.6	8.6	9.0	21.1	27.0	16.5	5.9	1.2	0.1					99.0
65	6.4	7.3	18.2	20.8	19.6	15.3	6.2	1.0						94.8
70	7.2	15.0	25.3	33.0	35.3	17.1	4.2	0.5						137.7
75	16.3	11.8	39.7	79.1	43.8	16.6	2.8	0.4						204.5
80	13.0	19.4	51.0	147.4	90.0	14.2	1.2	0.9						337.1
85	21.0	17.8	76.4	220.7	131.1	11.1	0.6	0.0						478.8
90	23.7	15.2	57.6	290.5	154.1	12.4	1.9							555.5
95	5.5	7.9	31.5	110.2	102.4	8.9	2.0	0.1						268.4
100	0.9	3.2	19.6	43.2	40.2	5.3	0.6							113.0
105	0.2	1.5	3.1	12.7	6.2	0.4								24.1
110		0.8	1.0	1.4	6.4	12.8								16.4
115		0.1	0.1	0.1		1.7								2.1
120														
SUM	131.5	159.6	394.4	1120.3	797.8	252.1	65.6	23.1	3.7	1.2	0.1			2949.5

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2500C,							BY ALTITUDE		SUP					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	20.9	19.6	59.5	121.0	109.2	40.2	11.7	5.3	1.7	0.5				413.6
40	34.1	25.4	16.8	26.1	49.9	41.5	9.8	0.9						204.5
60	11.3	10.5	7.7	15.9	31.9	12.6	6.2	2.8						99.0
65	11.8	11.9	19.5	10.6	19.7	14.4	6.3	0.6						94.8
70	12.6	19.6	31.2	25.4	21.2	22.1	5.0	0.4						137.7
75	16.7	18.3	41.0	75.2	26.8	25.0	3.2	0.2						204.5
80	17.7	24.4	76.7	117.8	73.8	25.1	1.6							337.1
85	28.9	20.6	97.8	166.5	137.9	25.5	1.7	0.0						478.8
90	29.5	16.7	85.6	234.0	159.1	28.9	1.7							555.5
95	8.4	8.0	43.3	66.3	101.7	36.4	4.3							268.4
100	2.3	3.7	16.1	26.7	49.5	13.1	1.6							113.0
105	0.5	1.7	1.0	6.2	11.3	3.3								24.1
110	0.0	0.4	0.6	2.2	0.4	10.9	1.9							16.4
115		0.0	0.1	0.2	0.0	1.5	0.3							2.1
120														
SUP	202.8	200.8	496.8	894.2	788.5	298.4	55.4	10.5	1.7	0.5				2949.5

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2700C,								BY ALTITUDE			LESS				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	0.5	1.5	0.4	2.2	1.0	2.1								7.7	
60		0.7			0.3	0.4								1.4	
65															
70	0.3													0.3	
75															
80															
85	0.3													0.3	
90	0.1													0.1	
95															
100															
105															
110															
115															
120															
SUP	1.2	2.3	0.4	2.2	1.3	2.5								9.8	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2700C,							BY ALTITUDE		LESS					
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
	C.2		1.0	3.0	2.7	0.1								7.7
40			0.3	0.6	0.6									1.4
60														
65														
70				0.3										0.3
75														
80														
85				0.3										0.3
90			0.1											0.1
95														
100														
105														
110														
115														
120														
SUP	0.2		1.4	4.9	3.3	0.1								9.8

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2700C,								BY ALTITUDE		1000				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	2.6	3.5	11.9	16.3	12.5	15.6	1.7	0.4						64.3
60	4.4	1.9	2.8	3.6	7.7	2.4	0.3							23.1
65	0.5	1.0	0.5	2.0	2.5									6.4
70	1.3	0.9	0.2	2.1	3.3	0.2								7.9
75	0.7	0.1	0.9	1.1	1.0	0.9								4.8
80		1.1	0.5	0.3	0.3	0.2								2.5
85		0.8	0.1	0.7										1.6
90		0.1												0.1
95		0.2	1.1											1.3
100		0.9												0.9
105	0.1	0.6												0.7
110														
115														
120														
SUM	9.7	11.0	18.0	26.0	27.4	19.2	2.0	0.4						113.7

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2700C,								BY ALTITUDE		1000				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	2.6	8.7	11.9	16.4	18.2	5.7	0.8							64.3
60	2.6	2.9	3.7	6.9	5.1	1.1	0.7							23.1
65	0.7	0.9	1.9	0.6	2.4									6.4
70	0.8	0.6	1.5	3.0	1.7	0.3								7.9
75	0.1	0.7	1.2	0.7	1.2	0.8								4.8
80	0.3	0.5	0.7	0.4	0.3	0.2								2.5
85		0.7	0.9											1.6
90		0.1												0.1
95		0.3	0.1	0.9										1.3
100		0.1	0.3	0.5										0.9
105			0.3	0.4										0.7
110														
115														
120														
SUM	7.2	15.4	22.7	29.8	29.0	8.1	1.5							113.7

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2700C,								BY ALTITUDE		2000				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	4.5	4.0	6.1	11.9	15.3	16.4	2.9	1.6	0.2					63.0
60	2.9	1.6	5.3	24.2	17.0	18.8	5.3	0.1	0.5					75.7
65	1.2	0.8	1.2	24.5	7.6	6.8	2.8							44.8
70	4.8	2.7	2.5	12.6	9.3	7.7	2.2	0.5						42.3
75	3.1	4.6	4.3	23.2	11.3	6.1	1.9							54.7
80	2.6	2.9	10.3	40.2	12.7	6.8	1.4	0.4						77.5
85	7.8	5.0	15.2	49.6	17.1	5.8	0.4	0.0						103.9
90	2.7	6.2	22.2	59.6	46.8	5.5	1.1	0.4						144.4
95	1.9	4.5	19.5	68.2	51.8	4.7	0.5							151.2
100	0.5	4.4	4.7	53.7	43.1	3.1	0.2							109.7
105	0.3	0.3	2.5	9.3	19.7	12.3								44.4
110	0.2	0.4	0.5	0.3	7.2	2.6								11.2
115				0.1										0.1
120														
SUM	32.5	17.4	94.5	377.5	259.1	96.6	18.7	3.1	0.7					920.0

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 27000,								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	3.2	6.2	11.9	10.3	21.6	8.6	0.6	0.6						63.0
40	2.4	6.1	9.9	14.1	24.2	12.9	5.4	0.6						75.7
60	0.9	1.5	8.5	9.3	17.8	5.3	1.4	0.1						44.8
65	3.2	2.2	10.2	10.1	7.9	6.0	2.5	0.1						42.3
70	1.9	4.2	13.3	18.9	8.5	4.3	2.9	0.6						54.7
75	2.0	8.3	12.4	29.2	13.8	7.2	4.8							77.5
80	7.4	9.7	18.2	40.7	19.7	3.5	1.7							100.9
85	3.9	12.8	21.1	57.7	42.7	4.9	1.4							144.4
90	3.2	9.1	20.7	56.0	49.3	11.9	0.9							151.2
95	0.7	2.1	7.8	35.3	54.9	8.7	0.2							109.7
100	0.3	1.8	6.0	5.6	26.4	4.4								44.4
105	0.2	0.3	0.9		8.7	0.9	0.2							11.2
110					0.1									0.1
115														
120														
SUM	29.4	64.1	141.0	287.1	295.4	78.6	22.2	2.1						920.0

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 27000,								BY ALTITUDE		5000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40		0.2	0.3	1.5	1.3	1.7								5.0
60	1.4	0.2	0.7	0.6	0.5	0.7								4.1
65	0.5	0.3	2.5	2.8	0.3	1.0								7.4
70	0.4	0.8	1.4	5.2	0.4	0.6	0.5							9.4
75	0.7		3.3	7.8	2.2	1.5	0.6							16.0
80	6.3	0.3	11.3	27.7	9.4	5.0								60.0
85	3.4	0.1	3.5	31.1	20.0	3.2	0.6							68.8
90	0.5		1.5	38.3	40.7	6.3	0.3							87.6
95			2.5	31.8	34.8	5.2								74.4
100			2.2	5.5	3.1	6.8								17.6
105		0.1	0.1	3.7	0.6	5.7								10.2
110		0.2		0.4	10.8	17.1								28.5
115						1.4								1.4
120														
SUM	13.2	2.2	29.1	163.4	124.2	56.2	1.9							390.2

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 27000,								BY ALTITUDE		5000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40		0.3	0.2		2.8	1.7								5.0
60	1.4	0.4	0.6	0.5	0.5	0.7								4.1
65	0.5	0.5	3.2	1.9	0.1	0.8	0.4							7.4
70	0.4	1.4	5.0	0.9	0.3	1.0	0.4							9.4
75	0.9	0.9	5.3	4.2	2.8	1.2	0.7							16.0
80	7.3	1.5	14.7	21.9	10.4	3.8	0.4							60.0
85	3.7	1.2	5.9	21.2	31.7	5.0	0.2							68.8
90	0.9	0.3	0.8	17.3	55.5	12.0	0.8							87.6
95	0.2	2.5	3.6	13.9	42.2	11.4	0.5							74.4
100		2.1		1.3	8.0	6.2								17.6
105		0.1	0.1	0.5	1.4	8.2								10.2
110		3.4			2.1	25.9	0.1							28.5
115						1.2	0.2							1.4
120														
SUM	15.2	11.5	35.4	83.4	157.8	78.9	3.8							390.2

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2700C,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	7.6	9.0	18.3	30.3	28.9	34.0	4.6	2.0	0.2					135.0
40	7.3	4.4	8.4	29.3	26.4	23.3	5.6	0.1	0.5					105.2
60	3.1	1.9	2.4	27.0	10.5	7.5	2.8							55.3
65	6.7	3.9	5.2	17.5	12.9	8.8	2.2	0.5						57.6
70	4.5	5.5	6.6	29.6	12.8	7.6	2.4							69.1
75	3.3	4.0	14.1	48.3	15.2	8.6	2.0	0.4						96.0
80	14.1	6.1	26.5	78.0	26.6	10.8	0.4	0.0						162.5
85	6.3	6.4	25.7	97.6	66.8	8.7	1.7	0.4						213.6
90	2.5	4.7	22.1	106.5	92.6	11.0	0.8							240.1
95	0.5	5.3	7.2	85.5	77.9	8.3	0.2							184.9
100	0.4	0.9	4.7	14.8	22.8	19.1								62.7
105	0.2	0.5	0.6	4.1	7.8	8.3								21.4
110		0.2		0.5	10.8	17.1								28.6
115					1.4									1.4
120														
SUM	56.5	52.9	142.0	569.1	412.0	174.5	22.6	3.5	0.7					1433.7

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 2700C,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	6.0	14.9	24.9	30.5	42.4	14.3	1.4	0.6						135.0
40	5.1	9.3	14.2	21.5	32.7	15.7	6.1	0.6						105.2
60	3.0	2.7	11.1	10.3	20.6	6.0	1.4	0.1						55.3
65	4.5	3.2	15.0	15.1	9.8	7.1	2.9	0.1						57.6
70	2.5	6.3	19.6	20.8	10.0	6.1	3.3	0.6						69.1
75	3.2	9.7	18.4	33.8	16.9	8.5	5.5							96.0
80	14.7	11.8	33.9	62.6	30.1	7.3	2.2							162.5
85	7.6	14.1	26.9	79.1	74.3	9.9	1.6							213.6
90	4.1	9.7	21.6	74.2	104.8	23.9	1.7							240.1
95	0.9	4.7	11.7	49.7	97.1	20.1	0.7							184.9
100	0.3	3.9	6.3	7.3	34.4	10.5								62.7
105	0.2	0.4	1.0	0.5	10.1	9.1	0.2							21.4
110		0.4			2.2	25.9	0.1							28.6
115						1.2	0.2							1.4
120														
SUM	52.0	51.1	204.5	405.3	485.5	165.7	27.5	2.1						1433.7

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 2900C,								BY ALTITUDE		LESS				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1		1.9							2.1
40														
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM					0.1		1.9							2.1



TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000, BY ALTITUDE LESS														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			2.0	0.1										2.1
40														
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM			2.0	0.1										2.1

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000, BY ALTITUDE 1000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.7	1.1	1.1	0.9	2.9	1.9	1.5	0.3	0.1	0.1	1.0			12.5
40		2.7	0.7	0.1		0.3	0.6							4.4
60		0.1				0.1	0.2							0.4
65		0.6				0.1								0.7
70			0.1											0.1
75			0.5			0.3								0.8
80														
85			0.2											0.2
90														
95			0.1											0.1
100		0.2	0.2	0.2										0.6
105														
110														
115														
120														
SUP	1.7	4.7	2.0	1.3	2.9	2.7	2.3	0.3	0.1	0.1	1.0			19.8

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		1000					
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
	0.2	0.2	4.0	2.7	3.1	0.6	0.7	1.1						12.5	
40		0.3	3.0	0.2	0.7	0.2								4.4	
60		0.1			0.2	0.1								0.4	
65		0.6			0.1									0.7	
70		0.1												0.1	
75		0.1	0.4		0.3									0.8	
80															
85		0.2												0.2	
90															
95			0.1											0.1	
100			0.6											0.6	
105															
110															
115															
120															
SUM	0.2	1.5	8.2	2.9	4.4	0.9	0.7	1.1						19.8	

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		2000					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	1.5	4.2	0.0	2.7	4.0	3.4	2.6	0.4	0.2					19.2	
40	0.6	1.2		0.5	1.1	3.0	1.4		0.2					8.1	
60	0.9	0.5	2.2		0.4	2.5	0.1		0.3					6.6	
65	1.0	0.8	1.0	0.1	0.3	2.8		0.0						6.0	
70	0.7	2.4	0.3		1.2	3.2	0.2							8.0	
75	0.2		1.3	0.6	1.9	1.7		0.2						5.8	
80	0.3		0.7	1.0	1.9	0.6		1.5						6.0	
85	0.2		1.9	0.7	4.6	0.3								7.7	
90			2.3	3.1	15.6	0.4								21.4	
95			1.1	1.2	5.2									7.5	
100															
105															
110															
115															
120															
SUM	5.4	9.2	10.7	9.9	36.4	17.9	4.4	2.1	0.4					96.4	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		2000					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	0.4	0.7	3.5	3.4	3.9	5.6	1.6	0.0						19.2	
40	0.1	0.5	2.1	0.2	1.9	3.0	0.3	0.1						8.1	
60	0.6	0.2	3.2		0.8	1.5	0.3							6.6	
65	1.0	0.2	1.8	0.5	0.7	1.3	0.5	0.0						6.0	
70	0.4	0.8	3.2	0.3	1.7	0.7	0.8							8.0	
75	0.2	1.5	0.5	1.3	1.7		0.5	0.1						5.8	
80	0.3	0.8	0.6	0.6	1.3		2.4							6.0	
85	0.2	0.1	2.1	3.3	1.4	0.4	0.2							7.7	
90		0.1	2.3	16.1	2.0	0.7	0.1							21.4	
95		0.2	0.7	1.2	4.0	1.3	0.1							7.5	
100															
105															
110															
115															
120															
SUM	3.1	5.3	20.2	26.9	19.2	14.5	6.9	0.3						96.4	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		5000					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS						0.6	0.2							0.9	
40					0.1	0.5	0.2							0.9	
60					2.1	1.1	1.4							3.6	
65					4.4	3.6								8.2	
70		0.7	0.5		2.5	2.4								11.2	
75		1.0	5.3		4.4	0.7								35.2	
80		0.5	29.6		5.8	2.4		0.2						22.6	
85		0.1	14.2	5.3	3.5	1.6	0.2							10.5	
90					0.8	1.4								2.2	
95					0.3	1.6								1.9	
100						0.2	1.2							1.4	
105															
110															
115															
120															
SUM			2.3	54.8	23.8	16.1	2.3	0.2						99.6	

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		5000				SUM
LESS	LFSS	10	20	30	40	50	60	70	80	90	100	110	120	
40					0.3	0.6								0.9
60					0.5	0.1	0.2							0.9
65				2.0	0.4	1.0	0.1							3.6
70			1.0	4.3	2.8	1.1								9.2
75			0.5	7.5	3.1		0.1							11.2
80			1.0	24.7	9.1	0.2								25.2
85			0.1	9.9	12.4		0.2							22.6
90		0.1		1.1	8.3	0.9	0.2							10.5
95			0.3	0.2	1.2		0.5							2.2
100			0.3		1.2	0.4								1.9
105				0.2	1.2									1.4
110														
115														
120														
SUM	0.1	3.3	49.8	40.4	4.5	1.4								99.6

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		SUM				SUM
LESS	LFSS	10	20	30	40	50	60	70	80	90	100	110	120	
40	3.2	5.3	1.2	3.7	7.0	5.3	6.0	0.7	0.3	0.1	1.0			33.8
60	0.6	3.9	0.7	0.6	1.1	4.0	2.3		0.2					13.4
65	0.9	0.6	2.2		0.5	3.1	0.6		0.3					7.9
70	1.0	1.4	1.0	0.1	2.4	4.0	0.4	0.0						10.3
75	0.7	2.4	1.1	0.5	5.6	6.7	0.2							17.2
80	0.2		2.7	5.9	4.4	4.3		0.2						17.8
85	0.3		1.2	30.5	6.4	1.3		1.5						41.1
90	0.2		2.2	14.9	10.4	2.7		0.2						30.6
95			2.3	8.4	19.1	2.0	0.2							31.9
100			1.2	1.2	6.0	1.4								9.8
105		0.2	0.2	0.2	0.3	1.6								2.5
110					0.2	1.2								1.4
115														
120														
SUM	7.1	17.9	15.8	66.0	63.2	36.8	10.9	2.7	0.5	0.1	1.0			217.8

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		SUM				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	0.5	0.9	5.5	6.1	7.0	6.2	2.4	1.1						33.8
60	0.1	0.8	5.1	0.4	2.9	3.8	0.3	0.1						13.4
65	0.6	0.3	3.2		1.5	1.8	0.5							7.9
70	1.0	0.8	1.8	2.4	1.2	2.3	0.6	0.0						10.3
75	0.4	0.9	4.2	4.6	4.5	1.8								17.2
80	0.2	1.6	1.4	8.8	5.0		0.6	0.1						17.8
85	0.3	0.8	1.7	25.3	10.4	0.2	2.4							41.1
90	0.2	0.4	2.3	13.1	13.8	0.4	0.4							30.6
95		0.2	2.3	17.2	10.3	1.6	0.3							31.9
100		0.2	1.1	1.4	5.2	1.3	0.6							9.8
105			0.9		1.2	0.4								2.5
110				0.2	1.7									1.4
115														
120														
SUM	3.3	6.8	33.6	79.7	64.0	19.9	9.0	1.4						217.8

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3100C.								BY ALTITUDE		LESS				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
		0.8			0.5	0.3	0.0							1.6
40														
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM		0.8			0.5	0.3	0.0							1.6

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3100C.														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40			0.9	0.3	0.1	0.2		0.0						1.6			
60																	
65																	
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM			0.9	0.3	0.1	0.2		0.0						1.6			

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT														3100C.		BY ALTITUDE			100C			
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM								
40	2.0	1.2	1.4	2.8	3.8	5.4	3.6	1.2	0.3	0.1				21.8								
60	0.4													0.4								
65	0.1													0.1								
70																						
75																						
80																						
85																						
90																						
95																						
100																						
105																						
110																						
115																						
120																						
SUM	2.5	1.2	1.4	2.8	3.8	5.4	3.6	1.2	0.3	0.1				22.4								

TAB I E VII - Continued

MINUTES FCR TORQUE2 VS AIRSPEED BY WEIGHT 3100C, BY ALTITUDE 1000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.4	1.1	2.4	6.9	4.1	4.1	1.0	0.5		0.3				21.8
40		0.4												0.4
60		0.1												0.1
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	1.4	1.6	2.4	6.9	4.1	4.1	1.0	0.5		0.3				22.4

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3100C, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.9	0.3	0.7	3.9	8.6	8.0	3.5	1.5	0.3					27.5
40	0.2	0.6	0.9	2.8	4.4	0.5	0.9	0.5						10.8
60	0.5			0.5	3.1		0.1							4.2
65	0.1			0.3	0.4	1.0								1.8
70	0.2	0.3			0.1									0.6
75	0.1	0.1	0.1											0.3
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	2.0	1.3	1.7	7.6	16.6	9.6	4.5	2.0	0.3					45.3

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3100C, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.3	0.8	3.4	6.9	8.1	4.5	2.5	0.1						27.5
40	0.9	0.6	3.3	1.9	0.6	0.3	1.0							10.8
60	0.2	0.3	2.5	1.1			0.1							4.2
65	0.1		0.5	0.2	1.0									1.8
70	0.3	0.2		0.1										0.6
75	0.2	0.1												0.3
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	3.0	2.0	12.0	10.2	9.7	4.8	3.6	0.1						45.3

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40							0.2							0.2
60						0.2	0.2							0.4
65					0.2	1.2								1.4
70					2.0	0.6								2.6
75				0.6	3.0	2.0	0.1							5.7
80				0.3	0.3	0.5	0.1							1.2
85														
90														
95														
100														
105														
110														
115														
120														
SLP				0.9	5.5	4.5	0.6							11.5

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40				0.2										0.2
60					0.2		0.2							0.4
65						1.4								1.4
70					2.4	0.2								2.6
75		0.1	0.2	0.3	2.8	2.3								5.7
80				0.4	0.3	0.5								1.2
85														
90														
95														
100														
105														
110														
115														
120														
SLP		0.1	0.2	0.9	5.7	4.5	0.2							11.5

MINUTES FOR TORQUE1 VS AIRSPEED BY WFTIGHT 31000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	2.9	2.3	2.0	6.8	12.9	13.7	7.1	2.8	0.4	0.1				51.0
40	0.6	0.6	0.9	2.8	4.4	0.5	1.1	0.5						11.5
60	0.6			0.5	3.1	0.2	0.3							4.7
65	0.1			0.3	0.6	2.2								3.3
70	0.2	0.3			2.1	0.6								3.2
75	0.1	0.1	0.1	0.6	3.0	2.0	0.1							6.0
80				0.3	0.3	0.5	0.1							1.2
85														
90														
95														
100														
105														
110														
115														
120														
SLP	4.5	3.3	3.0	11.3	26.4	19.8	8.7	3.3	0.4	0.1				80.8

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 31000,														BY ALTITUDE		SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM	
40	2.7	1.9	6.7	14.1	12.3	8.8	3.5	0.7		0.3						51.0	
60	0.9	1.0	5.5	2.1	0.6	0.3	1.0									11.5	
65	0.2	0.4	2.5	1.1	0.2		0.3									4.7	
70	0.1		0.5	0.2	1.0	1.4										3.3	
75	0.3	0.2		0.1	2.4	0.2										3.2	
80	0.2	0.2	0.2	0.3	2.8	2.3										6.0	
85				0.4	0.3	0.5										1.2	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM	4.3	3.7	15.5	18.2	19.6	13.6	4.8	0.7		0.3						80.8	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM	
40			0.2	0.5	0.5	0.1	0.1									1.5	
60			0.2													0.2	
65																	
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM			0.4	0.5	0.5	0.1	0.1									1.8	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM	
40	0.2															1.5	
60	0.2															0.2	
65																	
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM	0.4		0.1	0.5	0.4	0.3										1.8	

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000, BY ALTITUDE 1000														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.6	0.6	0.3	2.9	2.2	2.1	2.4	1.3		0.0				12.4
40	0.6	0.4	0.3	0.5										1.8
60	0.2													0.2
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	1.4	1.0	0.6	3.4	2.2	2.1	2.4	1.3		0.0				14.5

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000, BY ALTITUDE 1000														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.5	0.1	1.6	2.5	4.1	1.8	1.3	0.4	0.0					12.4
40	0.8	0.5	0.5											1.8
60	0.2													0.2
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	1.5	0.6	2.1	2.5	4.1	1.8	1.3	0.4	0.0					14.5

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000, BY ALTITUDE 2000														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.9	1.6	1.9	6.5	4.2	6.7	4.6	2.2	0.5					29.0
40	2.4	2.9	4.8	15.5	6.8	0.7	0.6	0.2						34.0
60	1.2	1.3	4.0	3.8	2.0	0.2	2.5							15.0
65	3.8	0.1	2.8	2.7	7.1	0.8	0.1							17.5
70	3.1	0.7	0.2	3.0	2.0	0.5	0.2							9.7
75	4.9	0.3	0.3	12.5	0.1									18.2
80	0.2	0.3	0.5	0.5										1.5
85		0.3												0.3
90														
95														
100														
105														
110														
115														
120														
SUM	16.6	7.6	14.5	44.4	22.3	8.9	7.9	2.4	0.5					125.1



TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000,								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.3	1.1	6.7	6.6	5.6	5.0	2.1	0.5						29.0
40	4.1	2.7	7.4	14.0	3.6	1.4	0.3							34.0
60	2.9	1.1	0.8	6.8	0.8	0.7	1.9							15.0
65	3.6	0.5	2.4	10.0	0.5	0.3	0.2							17.5
70	4.0	0.8	1.8	2.5		0.5	0.2							9.7
75	5.3		8.7	4.1										18.2
80	0.2		1.1	0.2										1.5
85				0.3										0.3
90														
95														
100														
105														
110														
115														
120														
SUM	21.5	6.2	29.3	44.5	10.6	7.8	4.7	0.5						125.1

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000,								BY ALTITUDE		5000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40					1.0									1.0
60					3.4									3.4
65					2.0									2.0
70				0.3	0.9									1.3
75				0.6	0.0									0.7
80			1.1											1.1
85														
90														
95														
100														
105														
110														
115														
120														
SUP			1.1	0.9	7.4									9.4

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000,							BY ALTITUDE		5000					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40					0.5	0.5								1.0
60					2.7	0.7								3.4
65					2.0									2.0
70				0.3	0.4	0.5								1.3
75				0.3	0.3									0.7
80				1.1										1.1
85														
90														
95														
100														
105														
110														
115														
120														
SUM				1.7	5.9	1.8								9.4

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000,													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.5	2.2	2.4	10.0	6.9	9.0	7.1	3.4	0.3	0.0				42.9
40	3.0	3.3	5.3	16.0	7.8	0.7	0.6	0.2						37.0
60	1.4	1.3	4.0	3.8	5.5	0.2	2.5							18.7
65	3.8	0.1	2.8	2.7	9.1	0.8	0.1							19.4
70	3.1	0.7	0.2	3.3	3.0	0.5	0.2							11.0
75	4.9	0.3	0.3	13.1	0.1									18.9
80	0.2	0.3	1.6	0.5										2.6
85		0.3												0.3
90														
95														
100														
105														
110														
115														
120														
SUM	18.1	8.5	16.7	49.4	32.4	11.2	10.5	3.6	0.3	0.0				150.7

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000,													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	2.0	1.2	8.4	9.6	10.1	7.1	3.4	0.9	0.3					42.9
40	5.2	3.2	8.3	14.0	4.1	1.9	0.3							37.0
60	3.1	1.1	0.8	4.8	3.5	1.4	1.9							18.7
65	3.6	0.5	2.4	10.0	2.5	0.3	0.2							19.4
70	4.0	0.8	1.8	2.8	0.4	1.0	0.2							11.0
75	5.3		8.7	4.5	0.3									18.9
80	0.2		1.1	1.3										2.6
85				0.3										0.3
90														
95														
100														
105														
110														
115														
120														
SUM	23.4	6.9	31.5	49.3	21.0	11.7	6.0	0.9	0.3					150.7

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000,													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.5		0.5	1.2	0.5	2.2	0.3						5.2
40	0.8		0.5		0.3		0.2							1.8
60	0.3													0.3
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	1.1	0.5	0.5	0.5	1.5	0.5	2.4	0.3						7.2

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 35000,								BY ALTITUDE		1000				SUM
LESS	10	20	30	40	50	60		70	80	90	100	110	120	
40	0.2	0.6	0.5	0.9	1.4	1.8	0.6							5.2
60			0.2	0.6		0.2								1.8
65			0.3											0.3
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	0.2	0.6	1.0	1.5	1.4	1.9	0.6							7.2

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000,								BY ALTITUDE		2000				SUM
LESS	10	20	30	40	50	60		70	80	90	100	110	120	
40	1.1	1.6	3.9	14.1	11.8	4.9	4.7	3.6	0.3					15.6
60	2.4	1.5	1.8	2.6	20.9	2.8	2.3	2.0						44.1
65	2.2	1.5	0.6	5.2	15.8	3.7	1.8	1.3						34.7
70	10.0	0.6	2.3	6.2	17.7	4.1	1.2							32.0
75	2.8	1.1	0.7	15.4	5.6	3.3	0.1							42.0
80		0.2	0.1	7.7	3.1	0.3								29.0
85				0.6										11.4
90														0.6
95														
100														
105														
110														
115														
120														
SUM	18.4	6.7	10.5	53.0	77.7	22.2	13.1	7.7	0.3					209.4

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 35000,								BY ALTITUDE		2000				SUM
LESS	10	20	30	40	50	60		70	80	90	100	110	120	
40	0.7	0.5	1.3	1.7	3.8	4.5	2.3	0.9						15.6
60	3.6	3.4	2.8	16.0	8.9	7.3	1.6	0.6						44.1
65	3.4	2.5	0.7	1.4	22.9	3.2	0.6							34.7
70	2.5	0.7	1.9	12.4	11.2	1.8	1.5							32.0
75	9.8	1.6	2.2	17.4	6.2	4.4	0.4							42.0
80	2.7	0.4	6.7	12.9	4.8	0.3	1.1							29.0
85	0.1	0.1	0.7	5.3	4.8	0.0	0.3							11.4
90					0.6									0.6
95														
100														
105														
110														
115														
120														
SUM	22.8	9.2	16.3	67.0	63.2	21.6	7.9	1.5						209.4

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40				0.3	1.0									1.4
60			C.3	2.2	5.1									7.6
65				1.0	3.4	0.9								5.3
70				0.8	1.7	0.4								2.9
75				0.2	1.1	1.6								2.9
80			C.2		2.2	0.9								3.3
85	C.1													0.1
90														
95														
100														
105														
110														
115														
120														
SLP	C.1		C.5	4.5	14.5	3.9								23.6

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40			C.2	0.1	1.0									1.4
60			C.5	2.2	4.8	0.1								7.6
65				0.9	3.2	1.3								5.3
70				0.2	1.1	1.6								2.9
75				0.2		2.8								2.9
80			C.2		2.2		0.9							3.3
85		C.1												0.1
90														
95														
100														
105														
110														
115														
120														
SLP		0.1	C.9	3.6	12.3	5.7	C.9							23.6

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.7	1.0	1.8	4.4	3.6	5.2	4.0	0.1					20.8
40	1.9	1.6	4.4	14.4	13.1	4.9	4.9	2.0						47.2
60	2.6	1.5	2.2	4.7	25.6	2.8	2.3	0.8						42.5
65	2.2	1.5	0.6	6.2	19.2	4.6	1.8	1.3						37.3
70	10.0	0.6	2.3	7.0	19.4	4.4	1.2							44.9
75	2.8	1.1	0.7	15.6	6.7	4.9	0.1							31.9
80		0.2	0.3	7.7	5.3	1.2								14.8
85	0.1			0.6										5.7
90														
95														
100														
105														
110														
115														
120														
SUM	19.6	7.2	11.5	58.0	93.7	26.5	15.5	8.0	0.1					240.2

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3500C,										BY ALTITUDE				SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	0.7	0.5	1.8	2.5	5.2	6.3	3.0	0.9						20.8	
60	3.8	4.0	3.2	16.7	9.9	7.5	1.6	0.6						47.2	
65	3.4	2.5	1.5	3.6	27.7	3.3	0.6							42.5	
70	2.5	0.7	1.9	13.2	14.3	3.1	1.5							37.3	
75	9.8	1.6	2.2	17.7	7.3	5.9	0.4							44.9	
80	2.7	0.4	6.7	13.1	4.8	3.1	1.1							31.9	
85	0.1	0.1	0.9	5.3	7.0	0.0	1.2							14.8	
90					0.6									0.7	
95															
100															
105															
110															
115															
120															
SUM	23.0	9.9	18.2	72.1	76.8	29.2	9.4	1.5						240.2	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3600C,										BY ALTITUDE				LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	0.2													1.1	
60	0.1													0.1	
65															
70															
75															
80															
85															
90															
95															
100															
105															
110															
115															
120															
SUM	0.3	0.1	0.1	0.2	0.3	0.0	0.1							1.2	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3600C,										BY ALTITUDE				LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40		0.1	0.6	0.4	0.0									1.1	
60			0.1											0.1	
65															
70															
75															
80															
85															
90															
95															
100															
105															
110															
115															
120															
SUM		0.1	0.7	0.4	0.0									1.2	

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3600C.								BY ALTITUDE		1000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.3	0.8	1.3	6.8	3.5	2.4	2.3	0.8	0.3					19.6
40	2.3	1.2	2.4	0.3	0.6		0.7	0.2						7.7
60	0.5		2.1	0.2		0.1	0.4							3.2
65	0.5		2.6	0.2	0.3									3.6
70	0.6		0.5	0.2		0.4								1.8
75	0.2													0.2
80														
85														
90														
95														
100														
105														
110														
115														
120														
SLP	5.4	2.0	9.0	7.7	4.4	2.9	3.4	1.0	0.3					36.1

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3600C.								BY ALTITUDE		1000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.7	0.6	5.7	5.4	3.0	1.5	2.5	0.2						19.6
40	0.5	0.9	4.0	1.2	0.2		0.9							7.7
60		0.7	0.5	1.6			0.4							3.2
65	0.2	0.2	1.8	1.1	0.3									3.6
70	0.4		1.0				0.4							1.8
75	0.2													0.2
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	2.0	2.3	13.1	9.4	3.5	1.5	4.1	0.2						36.1

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3600C.								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.2	0.6	1.2	2.3	4.2	3.8	5.5	5.0	0.3					23.6
40	1.7	1.5	3.4	7.6	7.7	3.6	13.2	1.9						40.4
60	0.7	1.1	3.3	15.7	7.9	5.0	4.5	0.7						39.1
65	0.4	4.1	4.4	13.9	16.1	5.5	2.2							46.6
70	1.0	2.4	4.7	16.1	10.5	4.4	0.9							39.9
75	0.2	1.5	2.9	19.7	8.0	3.4	0.4							35.9
80		0.7	0.5	8.5	4.3	3.4	0.1							17.4
85			0.8	2.9	2.1									5.8
90		0.2		0.2	0.1									0.5
95														
100														
105														
110														
115														
120														
SLP	4.3	12.1	21.0	86.7	60.9	29.2	26.7	7.6	0.3					249.2

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3600C, BY ALTITUDE 200C														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LFSS	C.3	C.8	1.7	4.0	4.2	5.1	4.3	0.6	2.5					23.6
40	C.9	3.3	6.5	5.4	5.9	4.8	12.4	1.3						40.4
60	C.5	2.0	5.4	15.2	5.3	5.9	4.9							39.1
65	2.3	1.4	11.5	14.8	9.1	6.2	1.5							46.6
70	1.5	1.9	15.2	7.6	4.6	7.5	1.5							39.9
75	1.3	2.7	15.4	8.5	5.5	2.0	0.5							35.9
80	C.1	C.3	7.8	7.1	C.3	1.1	0.6							17.4
85		C.3	1.3	2.3	C.5	1.0	0.4							5.8
90	C.2			0.2			0.1							0.5
95														
100														
105														
110														
115														
120														
SUM	7.1	12.7	64.8	65.1	35.3	33.5	26.3	1.9	2.5					249.2

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3600C, BY ALTITUDE 500C														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					1.3	1.2								2.4
40				0.4	2.6	1.0								4.0
60			C.8	0.4	4.3	3.1	0.1							8.7
65				0.5	C.4	2.5	0.5							3.9
70				0.8	3.1	2.6								6.6
75				0.5	C.9	1.0								2.4
80					1.5	0.2								1.6
85			C.2											0.2
90			C.3	0.3										0.6
95														
100														
105														
110														
115														
120														
SUM			1.3	3.0	14.1	11.5	0.4							30.4

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3600C, BY ALTITUDE 500C														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.9	1.6								2.4
40				0.4	2.5	1.1								4.0
60			C.4	0.7	4.2	3.2	0.2							8.7
65				0.4	C.8	1.8	0.9							3.9
70			C.8	1.6	2.8	1.4								6.6
75			C.4	1.7	C.3									2.4
80				1.3	C.4									1.6
85	C.2													0.2
90			C.4	0.2										0.6
95														
100														
105														
110														
115														
120														
SUM	C.2		2.1	6.3	11.7	9.0	1.1							30.4

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3600C,										BY ALTITUDE					SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
40	1.7	1.5	2.6	9.3	8.1	6.3	8.0	5.8	1.0					44.3		
60	4.1	2.7	5.8	7.8	9.5	4.8	13.9	2.1						50.6		
65	1.2	1.1	5.5	16.2	10.5	6.1	4.9	0.7						46.3		
70	1.0	4.1	7.8	14.4	20.7	8.6	2.3							58.9		
75	1.6	2.4	5.2	16.8	10.8	7.3	1.4							45.6		
80	0.4	1.5	2.8	20.5	11.2	6.0	0.4							42.7		
85		0.7	0.5	9.0	5.2	4.4	0.1							19.8		
90			0.8	2.9	3.6	0.2								7.4		
95		0.2	0.2	0.2	0.1									0.7		
100			0.3	0.3										0.6		
105																
110																
115																
120																
SUM	10.0	14.2	31.4	97.5	79.7	43.7	30.8	8.7	1.0					317.0		

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3600C,										BY ALTITUDE					SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
40	1.0	1.4	8.0	9.9	7.3	6.6	6.8	0.8	2.5					44.3		
60	1.4	4.2	10.6	6.6	6.9	6.3	13.3	1.3						50.6		
65	0.5	2.6	5.9	17.2	7.8	6.9	5.3							46.3		
70	2.5	1.5	13.7	16.6	13.5	9.4	1.7							58.9		
75	1.9	1.9	16.2	8.0	5.4	9.3	2.8							45.6		
80	1.5	2.7	16.3	10.1	8.2	3.4	0.5							42.7		
85	0.1	0.3	8.3	8.9	0.6	1.1	0.6							19.8		
90		0.3	1.3	3.6	0.9	1.0	0.4							7.4		
95	0.4			0.2			0.1							0.7		
100			0.4	0.2										0.6		
105																
110																
115																
120																
SUM	9.2	15.1	80.7	81.3	50.5	44.0	31.5	2.1	2.5					317.0		

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3700C,										BY ALTITUDE					LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
40		1.0	0.1	0.5	0.5	0.3								2.4		
60																
65																
70																
75																
80																
85																
90																
95																
100																
105																
110																
115																
120																
SUM		1.0	0.1	0.5	0.5	0.3								2.4		



TABLE VII - Continued

	MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3700C,						BY ALTITUDE		LESS					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.8	1.0	0.3	0.3								2.4
40														
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUP			0.8	1.0	0.3	0.3								2.4

PIALTES FOR TORQUEI VS AIRSPEED BY WEIGHT 37000.								BY ALTITUDE		1000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.6	0.2	2.2	3.6	5.6	3.5	5.2	3.1	0.2					24.1
40	0.7		1.4	1.7	2.8	0.2	0.7							7.6
60	0.2		0.1	0.9	0.8	0.3	0.1							2.5
65	0.1	0.1	0.2	2.5	0.2		0.2							3.3
70	0.1			0.8	0.4	0.2								1.4
75	0.2			0.5										0.7
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	1.8	0.3	3.9	10.1	9.8	4.2	6.2	3.1	0.2					39.6

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3700C,								BY ALTITUDE		100C					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	0.3	0.3	3.5	5.1	7.3	4.1	3.0	0.5						24.1	
40	0.2	1.6	0.2	4.7	0.1	0.2	0.5							7.6	
60	0.1	0.2	0.4	0.6	0.7		0.4							2.5	
65	0.2			1.8	1.1			0.2						3.3	
70	0.1		0.3	0.9			0.2							1.4	
75	0.1	0.1	0.5											0.7	
80															
85															
90															
95															
100															
105															
110															
115															
120															
SUM	0.9	2.3	4.9	13.0	9.3	4.3	4.1	0.8						39.6	

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3700C, BY ALTITUDE 200C														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.0	0.1	1.5	3.4	7.0	6.5	5.4	5.7	0.5					30.9
40	5.0	3.7	2.5	18.6	18.6	19.7	5.8	4.6						78.4
60	2.5	2.1	4.1	34.0	26.2	23.2	8.9	0.5	0.4					101.8
65	1.6	2.0	2.8	26.0	59.5	39.3	3.7	1.0						136.9
70	1.6	2.2	3.8	22.7	19.3	19.4	2.0	1.8						72.8
75	0.7	1.4	1.8	11.7	9.1	4.8	3.0	1.8						34.3
80	0.5	0.7	3.6	5.0	2.5	1.2	1.7							15.3
85	0.1		0.6	1.2	0.1	1.2								3.1
90		0.2	0.3	0.3	0.6	0.4	0.1							1.9
95					3.6	0.3	0.3							4.2
100		0.2	0.4	2.3	1.1	0.4								4.4
105				0.2	0.4	0.8	0.1							1.6
110														
115														
120														
SUM	13.0	13.4	21.4	125.3	148.1	117.2	31.1	15.3	0.7					485.6

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3700C, BY ALTITUDE 200C														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.9	1.1	2.3	5.7	4.8	4.9	8.9	1.3						30.9
40	4.3	6.3	13.6	11.1	18.8	10.7	11.4	1.9	0.2					78.4
60	2.2	2.5	18.0	21.8	33.3	17.4	6.3	0.3						101.8
65	3.2	2.6	18.7	27.6	53.5	26.4	4.5	0.5						136.9
70	1.0	3.2	17.2	14.5	17.0	17.6	2.4							72.8
75	1.6	0.8	5.8	9.1	7.9	7.7	1.0	0.5						34.3
80	1.0	0.8	5.8	2.9	1.7	1.4	0.8	0.9						15.3
85	0.6		0.9	0.3	1.1	0.2	0.1							3.1
90	0.3	0.2		0.2	1.1	0.1								1.9
95				0.6	2.9	0.6								4.2
100	0.2		0.4	1.1	2.7									4.4
105				0.2	1.4									1.6
110														
115														
120														
SUM	16.2	17.4	82.7	95.1	146.1	87.0	35.4	5.5	0.2					485.6

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3700C, BY ALTITUDE 500C														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.6	4.4	0.3							5.3
40				0.2	1.9	1.8	0.3							4.2
60				0.7	4.6	4.0	0.5							9.8
65				3.7	3.3	7.6	0.6							15.2
70			C.2	3.9	5.1	3.5	1.8							14.4
75				1.8	0.3	0.2								2.4
80				1.9	0.1		0.4							2.5
85				2.9	1.2									4.2
90				0.8	0.7	0.3								1.8
95					0.8	0.2								1.0
100														
105														
110														
115														
120														
SUM			C.2	16.1	18.6	22.0	3.9							60.7

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3700G.								BY ALTITUDE		500C				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40				0.2	2.3	2.8								5.3
60				0.2	1.1	2.8								4.2
65				0.7	2.5	6.6								9.8
70		3.6	0.8	0.1	3.0	7.4	0.3							13.2
75		3.8	0.4	1.3	3.7	3.4	1.8							14.4
80	0.1		0.5	0.4	1.2	0.2								2.4
85		0.1	0.4	1.7		0.3								2.5
90	0.9		1.5	1.6	0.2									4.2
95	0.5		0.2	0.9	0.1	0.2								1.8
100				0.7	0.3									1.0
105														
110														
115														
120														
SUM	1.5	7.5	3.7	7.9	14.4	23.7	2.2							60.7

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3700G.								BY ALTITUDE		SUM				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	1.6	1.3	3.8	7.5	13.1	10.2	10.5	8.7	0.6					57.5
60	5.7	3.7	3.9	20.3	21.9	24.3	6.9	4.6						91.2
65	2.7	2.1	4.2	35.1	28.9	25.3	9.2	0.5	0.4					108.4
70	1.7	3.1	3.0	29.3	64.3	43.3	4.4	1.0						150.0
75	1.7	2.2	3.8	27.2	22.9	27.2	2.6	1.8						89.4
80	0.9	1.4	2.0	16.1	14.2	8.2	4.8	1.8						49.5
85	0.5	0.7	3.6	6.8	2.9	1.4	1.7							17.7
90	0.1		0.6	3.1	0.2	1.2	0.4							5.5
95		0.2	0.3	3.3	1.8	0.4	0.1							6.0
100			0.8	4.3	0.6	0.3								6.1
105		0.2	0.4	2.3	1.8	0.6								5.4
110				0.2	0.4	0.8	0.1							1.6
115														
120														
SUM	14.8	14.7	25.6	152.1	176.9	143.6	41.1	18.4	0.9					588.3

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3700G.								BY ALTITUDE		SUM				SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	2.2	1.4	6.6	11.8	12.5	9.2	11.9	1.9						57.5
60	4.5	7.9	13.8	16.0	21.2	13.7	11.9	1.9	0.2					91.2
65	2.3	2.7	18.4	22.6	35.1	20.2	6.7	0.3						108.4
70	3.3	2.6	18.7	30.2	57.0	33.0	4.5	0.7						150.0
75	1.0	6.7	18.3	15.5	20.0	24.9	2.9							89.4
80	1.7	4.7	6.7	10.4	11.5	11.1	2.8	0.5						49.5
85	1.1	0.8	6.2	3.3	2.9	1.6	0.8	0.9						17.7
90	0.6	0.1	1.2	2.0	1.1	0.5	0.1							5.5
95	1.2	0.2	1.5	1.8	1.3	0.1								6.0
100	0.5		0.2	1.5	3.1	0.8								6.1
105	0.2		0.4	1.7	3.1									5.4
110				0.2	1.4									1.6
115														
120														
SUM	18.6	27.2	92.1	117.1	170.0	115.3	41.6	6.2	0.2					588.3

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 38000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40					1.1	0.5		0.4						2.0			
60					0.2									0.2			
65					0.2									0.2			
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM					1.6	0.5		0.4						2.4			

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 38000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40		0.1	0.7	0.3		0.6	0.4							2.0			
60						0.2								0.2			
65						0.2								0.2			
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM		0.1	0.7	0.3		1.0	0.4							2.4			

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 38000,														BY ALTITUDE		1000	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40	0.3	1.7	1.3	3.0	5.3	4.3	6.4	5.2	1.3	0.1				29.0			
60	1.3	2.2	1.3	2.4	3.7	4.8	2.4	0.2	0.4					18.7			
65	0.1	0.2	0.2		2.6	0.5	0.4	1.8						6.2			
70	0.2	0.0		0.3	0.5	0.2	0.2							1.4			
75	0.1	0.0			0.5									0.6			
80					0.0	1.0								1.1			
85						0.1								0.1			
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM	2.0	4.2	2.8	5.7	12.1	11.3	9.4	7.2	1.7	0.1				57.1			

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3800C,											BY ALTITUDE 100C				SUM
LESS	LESS	10	20	30	40	50	60	70	80		90	100	110	120	
40	C.8	C.9	4.0	4.4	5.6	3.4	7.7	2.0	C.3						29.0
60	2.0	1.7	3.6	4.9	1.3	1.3	3.6	0.1	C.2						18.7
65	C.2	C.2	C.3		2.6	0.4	1.3	0.1	1.3						6.2
70	C.1		C.0		0.6	0.2	0.4								1.4
75			C.0				0.5								0.6
80						C.0	1.0								1.1
85							0.1								0.1
90															
95															
100															
105															
110															
115															
120															
SUM	3.1	2.7	8.7	9.3	10.0	5.4	14.6	2.2	1.9						57.1

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3800C,											BY ALTITUDE 200C				SUM
LESS	LESS	10	20	30	40	50	60	70	80		90	100	110	120	
40	3.1	C.1	1.5	3.9	9.6	10.5	7.1	13.8	6.9		0.9				57.5
60	4.6	4.5	9.9	21.7	30.4	34.3	29.7	15.5	C.5		1.1				152.4
65	2.9	2.4	4.1	18.3	34.9	33.3	20.9	6.9	C.3		0.4				124.2
70	2.3	3.0	3.6	15.5	25.0	53.6	20.1	1.7	C.3						137.9
75	8.8	2.2	2.9	7.5	37.0	40.5	10.3	1.6							110.6
80	7.9	2.2	2.2	11.5	37.5	22.8	3.2	0.1							87.5
85	2.7	0.8	1.1	8.4	11.8	5.5	1.0								31.3
90	C.4		C.7	2.7	1.7	1.3	0.6								7.5
95			C.3	0.8	0.6	0.7									2.4
100				0.4	0.1										0.5
105															
110															
115															
120															
SUM	32.8	15.1	26.3	90.8	192.8	202.6	101.7	39.7	7.5	2.5					711.7

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3800C,											BY ALTITUDE 200C				SUM
LESS	LESS	10	20	30	40	50	60	70	80		90	100	110	120	
40	4.3	1.3	6.2	6.2	5.7	7.7	16.3	9.0	C.4		0.1				57.5
60	8.4	6.8	21.0	25.6	13.9	31.4	31.8	13.1	C.4						152.4
65	5.6	8.2	20.2	17.7	24.0	26.2	16.5	6.9	0.7						124.2
70	2.7	4.9	16.0	19.6	44.0	36.9	13.0	0.8							137.9
75	9.6	2.2	7.0	14.7	33.3	37.0	6.5	0.3							110.6
80	8.9	2.8	5.2	11.3	25.6	24.6	8.7	0.4							87.5
85	2.6	1.6	7.5	1.9	11.6	2.6	3.4								31.3
90	C.2	C.2	1.4	1.3	2.4	1.4		0.6							7.5
95		C.3			1.4			0.7							2.4
100					C.4	C.1									0.5
105															
110															
115															
120															
SUM	42.4	26.5	84.5	99.3	162.4	168.0	96.3	31.8	1.5	0.1					711.7

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3800C, BY ALTITUDE 500C														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40				3.6	6.0	6.5								16.1
60				0.8	5.3	1.3	2.2							9.7
65			0.3	2.5	13.9	9.7		0.1						26.5
70			0.2	2.2	11.9	8.1								22.5
75				5.7	6.1	5.8	1.8							19.4
80			0.3		2.0	3.0								5.4
85	0.2	0.2			0.5	0.5								1.5
90			0.3	0.1										0.4
95														
100														
105														
110														
115														
120														
SUM	0.2	0.2	1.1	15.0	45.8	35.0	4.0	0.1						101.4

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3800C, BY ALTITUDE 500C														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40					6.0	8.0	2.1							16.1
60				0.2	2.3	4.9	0.6	1.6						9.7
65			1.9	0.1	4.5	19.6	0.4							26.5
70		1.2	0.8	0.4	7.6	9.4	3.1							22.5
75			4.8	1.2	3.4	8.0	2.3							19.4
80				0.3	1.5	2.8	0.8							5.4
85	0.2			0.2	0.5	0.5								1.5
90			0.2	0.2										0.4
95														
100														
105														
110														
115														
120														
SUM	0.2	1.2	7.8	2.6	25.8	53.2	8.9	1.6						101.4

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3800C, BY ALTITUDE 500C														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	3.4	1.8	2.8	6.9	16.1	15.3	13.5	19.4	8.3	1.0				88.5
60	5.9	6.6	11.2	27.7	40.3	45.6	32.1	15.7	0.9	1.1				187.3
65	3.0	2.6	4.3	19.2	43.0	35.1	24.0	8.7	0.0	0.4				140.2
70	2.5	3.0	3.9	18.3	43.4	63.5	29.4	1.8	0.0					165.8
75	9.0	2.2	3.1	9.8	49.0	49.1	10.0	1.6						133.7
80	7.9	2.2	2.2	17.2	43.7	29.7	5.0	0.1						108.0
85	2.7	0.8	1.4	8.4	13.9	8.7	1.0							36.8
90	0.6	0.2	0.7	2.7	2.3	1.9	0.6							9.0
95			0.6	0.9	0.6	0.7								2.8
100				0.4	0.1									0.5
105														
110														
115														
120														
SUM	35.0	19.5	30.2	111.5	252.3	249.5	115.6	47.4	9.0	2.5				872.7

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3800C,										BY ALTITUDE		SUM			
LESS	LFSS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	10.4	8.5	10.8	10.9	11.3	11.8	24.3	11.0	0.7	0.1				88.5	
60	5.6	6.4	20.5	17.9	28.9	31.8	18.4	8.6	2.0					187.3	
65	2.8	4.9	18.0	19.7	49.1	56.7	13.8	0.8						140.2	
70	9.7	3.4	7.9	15.1	40.9	46.4	10.1	0.3						165.8	
75	8.9	2.8	10.0	12.5	29.0	32.6	11.7	0.4						133.7	
80	2.6	1.6	7.5	2.2	13.1	5.4	4.3							108.0	
85	0.4	0.2	1.4	1.5	3.0	2.0		0.6						36.8	
90		0.3	0.2	0.2	1.4			0.7						9.0	
95					0.4	0.1								2.8	
100														0.5	
105															
110															
115															
120															
SUM	45.6	30.5	100.9	110.6	198.2	227.6	120.2	35.7	3.3	0.1				872.7	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3900C,										BY ALTITUDE		LESS			
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	0.6		0.3	0.5		0.4	0.1							1.4	
60	0.1			0.2										0.8	
65				0.2										0.1	
70														0.2	
75				0.2										0.2	
80				0.4										0.4	
85															
90															
95															
100															
105															
110															
115															
120															
SUM	0.7		0.3	1.4		0.4	0.1							3.0	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3900C,										BY ALTITUDE		LESS			
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40		0.3	0.5			0.4	0.1	0.0						1.4	
60		0.6	0.2											0.8	
65		0.1												0.1	
70			0.2											0.2	
75				0.2										0.2	
80			0.4											0.4	
85															
90															
95															
100															
105															
110															
115															
120															
SUM		1.0	1.4			0.4	0.1	0.0						3.0	

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3900C,														BY ALTITUDE 100C	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	2.4	0.6	1.7	2.2	5.3	3.4	7.2	5.3	1.1	0.2	0.3			29.7	
40	0.8	1.4	1.2	1.8	1.5		1.6	2.2						10.5	
60	0.2			0.1	0.1		2.1	0.2						2.7	
65	0.8				0.6									1.4	
70	0.4				0.6	0.1	0.2							1.3	
75	0.1				1.3	0.2								1.6	
80	0.1				0.4									0.4	
85															
90															
95															
100															
105															
110															
115															
120															
SUM	4.7	2.0	3.0	4.1	9.9	3.7	11.1	7.8	1.1	0.2	0.3			47.7	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3900C,														BY ALTITUDE 100C	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	2.5	0.8	3.5	4.3	4.6	4.7	5.9	3.0	0.6					29.7	
40	1.8	1.7	1.9	1.3			1.0	2.9						10.5	
60	0.1	0.1	0.1	0.1			1.3	1.0						2.7	
65		0.8	0.6											1.4	
70		0.4	0.6				0.3							1.3	
75		0.1	1.3				0.2							1.6	
80		0.1	0.4											0.4	
85															
90															
95															
100															
105															
110															
115															
120															
SUM	4.4	3.9	8.3	5.6	4.6	4.7	8.7	6.9	0.6					47.7	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3900C,														BY ALTITUDE 200C	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	1.0	0.2	1.2	5.7	6.5	7.9	9.5	12.1	5.1	0.7				49.7	
40	4.0	2.1	5.8	14.4	21.9	30.3	29.9	24.7	0.7	1.6				135.4	
60	4.5	2.2	2.2	12.6	12.5	22.5	23.9	6.9		0.1				87.5	
65	7.1	2.0	2.1	17.9	24.9	31.8	22.7	2.4						111.0	
70	12.3	1.3	2.8	9.7	29.7	19.8	12.1	1.0						88.6	
75	5.9	3.2	1.9	10.0	21.5	19.8	3.3	0.9						66.4	
80	0.4	0.3	2.9	1.3	10.5	13.6	1.6							30.5	
85	0.4	0.5	0.9	0.5	1.1	2.2	0.6							6.2	
90	0.0	0.2	0.4		0.4	2.0								3.0	
95	0.0		0.3	0.1										0.4	
100															
105															
110															
115															
120															
SUM	35.6	12.0	20.6	72.2	125.0	149.9	103.5	47.9	5.7	2.4				578.8	



TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3900C,										BY ALTITUDE		200C			
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	1.5	1.6	2.8	7.8	6.1	8.9	10.7	7.2	3.7					49.7	
40	7.0	7.7	7.5	10.4	34.4	26.4	28.8	12.5	0.8					135.4	
60	7.1	4.6	4.0	8.1	22.4	17.7	14.7	8.0	0.9					87.5	
65	8.7	5.0	3.1	23.7	30.4	25.4	13.3	1.4						111.0	
70	13.2	5.3	6.7	9.8	14.9	29.6	7.9	1.2						88.6	
75	5.4	4.8	13.1	6.8	7.4	25.0	3.8							66.4	
80	0.7	0.1	2.6	4.0	3.1	19.1	0.8							30.5	
85	0.0		0.5	2.3	0.8	2.6								6.2	
90	0.0		0.3	0.1	2.5									3.0	
95	0.0	0.3			0.1									0.4	
100															
105															
110															
115															
120															
SUM	43.7	25.5	40.6	73.1	122.1	154.7	80.0	30.3	4.7					578.8	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 3900C,								BY ALTITUDE		500C				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40				0.6	0.2	3.5	1.9	0.1						6.3
60					5.5	13.5	0.1	0.2						19.7
65					14.7	27.2	2.7							44.5
70				0.4	12.0	5.6	2.1							20.1
75			0.1		1.6	4.2	8.0							13.9
80		0.1		0.3	1.0	2.0								3.4
85				0.1	0.0									0.1
90					0.2									0.2
95														
100														
105														
110														
115														
120														
SUM		0.1	0.1	1.4	35.3	56.3	14.8	0.3						108.3

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 3930C,								BY ALTITUDE		500C				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40				0.7	0.5	3.1	1.9	0.1						6.3
60				0.3	4.3	14.8	0.1	0.2						19.7
65			0.9	0.6	6.9	33.7	0.4	2.0						44.5
70			6.6	1.9	0.5	8.0	3.0	0.1						20.1
75			1.3	0.2		2.4	10.0							13.9
80		0.1			0.5	2.8								3.4
85					0.1									0.1
90					0.2									0.2
95														
100														
105														
110														
115														
120														
SUM		0.1	8.8	3.9	13.1	64.7	15.4	2.4						108.3

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 39000,														BY ALTITUDE		SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120				
LESS	3.4	0.8	3.2	8.4	11.8	11.8	16.8	17.4	6.1	0.8	0.3					80.8	
40	5.4	3.5	7.1	16.9	23.6	33.7	33.4	27.1	0.7	1.6						153.0	
60	4.8	2.2	2.2	12.7	19.1	36.4	26.2	7.4		0.1						110.0	
65	7.9	2.0	2.1	18.1	40.1	59.0	25.4	2.4								157.1	
70	12.6	1.3	2.8	10.1	42.3	25.5	14.4	1.0								110.0	
75	5.9	3.2	2.0	10.2	24.4	24.2	11.3	0.9								82.2	
80	0.5	0.4	2.9	2.0	11.9	15.6	1.5									34.8	
85	0.4	0.5	0.9	0.6	1.2	2.2	0.6									6.4	
90	0.0	0.2	0.4		0.6	2.0										3.2	
95	0.0		0.3	0.1												0.4	
100																	
105																	
110																	
115																	
120																	
SUM	41.0	14.1	23.9	79.1	174.0	210.4	129.5	56.0	6.8	2.5	0.3					737.8	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 39000,														BY ALTITUDE		SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120				
LESS	4.0	2.7	6.8	12.1	15.7	15.9	15.7	10.3	3.7							80.8	
40	8.8	10.0	9.6	12.4	34.9	29.4	31.7	15.5	0.7							153.0	
60	7.2	4.8	4.0	8.5	26.8	32.5	16.1	9.2	0.9							110.0	
65	8.7	5.8	4.8	24.3	37.3	59.1	13.7	3.4								157.1	
70	13.2	5.7	13.9	11.8	15.4	37.6	11.1	1.3								110.0	
75	5.4	4.9	16.0	7.0	7.5	27.4	14.1									82.2	
80	0.7	0.3	3.4	4.0	3.6	21.9	0.8									34.8	
85	0.0		0.5	2.3	0.9	2.6										6.4	
90	0.0		0.3	0.1	2.7											3.2	
95	0.0	0.3			0.1											0.4	
100																	
105																	
110																	
115																	
120																	
SUM	48.1	24.5	59.2	82.5	139.8	224.5	104.2	39.6	5.4							737.8	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000,														BY ALTITUDE		LESS	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120				
LESS			0.4	0.1	0.9	0.2	1.7									3.3	
40							0.9									0.9	
60																	
65																	
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM			0.4	0.1	0.9	0.2	2.6									4.1	

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40			0.3	0.3	0.8	0.4	1.5							3.3
60							0.9							0.9
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SLP			0.3	0.3	0.8	0.4	2.4							4.1

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE														1000
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.5	0.1	0.5	1.0	4.6	7.8	10.3	8.0	3.3	1.5	0.7			38.8
60	0.7	1.2	0.7	1.1	2.4	0.9	5.3	2.4	2.0	0.2				16.8
65	0.1	0.0	0.3	0.2	1.4	2.1	0.6	0.6	0.2					4.1
70	0.4	0.2		0.7		1.1	0.0	0.3						5.4
75					0.4	0.4	0.5	0.3						2.7
80					0.2	0.3	0.7							1.7
85					0.3									1.2
90														0.3
95														
100														
105														
110														
115														
120														
SLP	1.8	1.6	1.9	3.8	9.4	13.0	18.3	13.1	5.1	1.7	0.7			71.1

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE														1000
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.6	1.4	1.1	2.3	1.2	0.7	4.9	3.5	1.0					38.8
60	0.4	0.4	0.1	0.3		0.7	0.4	1.6	0.2					16.8
65	0.2	0.3		0.1		1.5	2.9	0.4						4.1
70	0.2		1.1			0.8	0.6	0.0						5.4
75						0.4	0.7	0.3	0.1					2.7
80						0.2	0.5	0.4						1.7
85						0.3								1.2
90														0.3
95														
100														
105														
110														
115														
120														
SLP	1.4	3.0	3.0	6.5	8.0	11.5	19.2	14.9	3.6					71.1

TABLE VII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000,										BY ALTITUDE 2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.9	0.4	0.9	7.2	11.9	9.9	18.5	17.7	8.9	2.3				78.5
40	1.4	4.2	7.4	14.9	43.1	47.1	77.3	26.9	8.9	0.9				231.6
60	0.7	0.7	3.8	12.1	25.6	29.9	39.7	13.4	2.9	0.1				128.7
65	1.2	2.2	7.1	13.6	40.1	36.3	24.6	4.6	0.4					130.5
70	2.7	1.1	5.7	8.1	52.7	46.7	16.2	1.9	0.1					135.4
75	1.0	0.9	2.1	7.3	25.6	19.3	6.3	2.6						65.1
80	0.5	0.7	1.9	3.8	6.5	19.3	1.9	1.2						35.8
85		0.6	0.8	0.5	1.1	0.8	1.6	0.1						5.5
90				3.0		0.1								3.1
95				1.0										1.0
100			0.2	0.3										0.5
105														
110														
115														
120														
SUM	8.4	10.6	29.9	71.7	206.7	209.3	186.1	68.5	21.3	3.3				815.7

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000,										BY ALTITUDE 2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.6	1.4	4.2	8.1	8.3	14.3	18.3	17.9	4.5					78.5
40	3.2	9.8	11.8	15.2	36.8	54.2	60.3	38.0	2.4					231.6
60	2.4	3.5	8.4	13.0	24.6	23.7	33.4	17.0	2.0					128.7
65	2.0	3.6	8.4	18.7	25.8	42.8	23.0	5.6	0.6					130.5
70	2.0	2.0	14.2	16.0	24.1	56.9	13.7	6.4	0.1					135.4
75	1.1	0.9	8.7	6.3	17.3	14.3	10.6	5.9						65.1
80	0.5	0.8	1.5	6.4	4.6	14.3	5.9	1.8						35.8
85	0.1	0.2	0.4	0.8	1.2	0.4	2.3	0.1						5.5
90					2.3	0.8								3.1
95					0.6	0.4								1.0
100					0.5									0.5
105														
110														
115														
120														
SUM	12.7	22.2	57.6	84.4	146.1	222.0	167.6	92.6	10.5					815.7

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000,										BY ALTITUDE 5000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				3.0	2.2	5.5	0.1	0.4	0.0	0.8				0.6
40				2.7	3.7	6.1	1.9	0.7						13.0
60														15.1
65			0.4	1.2	16.1	22.0	3.2	1.1	0.1					44.1
70			0.4	2.7	12.4	18.7	5.6	1.2	0.1					39.3
75			0.2	2.6	5.6	14.4	5.8	1.8						30.3
80				0.1	6.6	7.1	2.1	0.9	0.4					17.2
85			0.3		0.9	0.7								1.8
90						0.2								0.2
95														
100														
105														
110														
115														
120														
SUM		1.4	12.1	47.4	72.7	18.6	6.0	2.7	0.8					161.7

TABLE VII - Continued

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS								0.6						0.6
40			0.7	0.3	3.7	2.8	4.3	1.2						13.0
60			1.3	3.0	2.9	5.2	2.4	0.2						15.1
65		0.1	1.2	1.9	3.3	25.8	11.4	0.4						44.1
70		0.3	0.7	1.0	2.8	21.2	12.6	0.7						39.3
75			2.6	0.5	5.6	18.7	2.2	0.7						30.3
80				0.1	6.0	9.0	2.2							17.2
85				0.9	0.5	0.2	0.2							1.8
90					0.2									0.2
95														
100														
105														
110														
115														
120														
SUM		0.4	6.5	7.8	25.1	82.9	35.2	3.8						161.7

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.9	0.5	1.8	9.1	17.3	17.9	30.6	25.7	12.9	3.8	0.7			121.1
40	2.0	5.5	8.1	18.9	47.7	53.4	83.6	29.6	11.5	1.9				262.3
60	1.4	0.7	4.2	14.8	29.3	36.3	42.4	15.7	3.0	0.1				147.9
65	1.3	2.2	7.8	15.0	57.5	60.3	28.4	6.2	1.2					180.0
70	3.1	1.3	6.1	11.4	65.2	64.5	21.8	3.4	0.6					177.5
75	1.0	0.9	2.3	9.8	31.7	34.1	12.5	4.7						97.1
80	0.5	0.7	1.9	3.9	13.3	26.7	4.8	2.1	0.4					54.2
85		0.6	1.1	0.5	2.3	1.5	1.6	0.1						7.6
90				3.0		0.3								3.3
95				1.0										1.0
100			0.2	0.3										0.5
105														
110														
115														
120														
SUM	10.2	12.2	33.5	87.8	264.4	295.2	225.6	87.7	29.6	5.8	0.7			1252.6

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000,										BY ALTITUDE		SUM			
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	1.6	2.3	5.1	12.1	15.9	21.4	29.0	27.0	6.7					121.1	
40	3.7	11.2	13.7	17.8	41.6	57.7	70.4	42.7	3.4					262.3	
60	2.8	3.8	9.8	16.3	27.6	29.6	36.2	18.7	3.1					147.9	
65	2.2	4.0	9.6	20.7	29.2	70.1	37.3	6.4	0.5					180.0	
70	2.2	2.3	16.0	17.0	26.9	79.0	26.9	7.2	0.1					177.5	
75	1.1	0.9	11.3	6.9	23.0	33.4	13.5	7.0	0.1					97.1	
80	0.5	0.8	1.5	6.5	10.6	23.5	8.7	2.2						54.2	
85	0.1	0.2	0.4	1.7	1.7	0.9	2.5	0.1						7.6	
90					2.5	0.8								3.3	
95					0.6	0.4								1.0	
100					0.5									0.5	
105															
110															
115															
120															
SUM	14.1	25.7	67.3	99.0	179.9	316.8	224.5	111.2	14.1					1052.6	

TABLE VII - Concluded

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT							SUM	BY ALTITUDE			SUM			
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	66.5	74.2	114.8	271.6	311.3	253.7	151.1	114.6	34.2	7.1	2.1			1401.3
40	73.2	79.8	101.8	224.3	263.8	266.5	207.0	86.2	14.7	4.6				1322.1
60	41.8	21.4	52.9	167.3	217.6	177.9	126.5	35.7	3.5	0.6				855.2
65	43.6	27.9	65.5	166.7	311.2	278.6	104.3	14.2	1.5					1023.3
70	64.3	43.1	88.3	183.3	290.1	221.9	62.9	8.5	0.0					962.9
75	52.3	26.2	103.7	308.7	227.5	145.8	40.8	8.6						923.7
80	48.2	44.6	148.9	404.6	227.3	97.2	14.3	4.5	0.4					990.1
85	44.6	55.2	162.0	497.4	299.3	38.2	8.7	0.7						1106.2
90	41.5	46.4	142.8	598.0	391.8	42.2	5.8							1268.5
95	11.8	25.0	71.8	280.0	284.4	29.8	3.4	0.1						706.3
100	3.1	9.2	35.0	52.5	100.9	35.6	0.9							277.1
105	0.4	2.9	6.8	23.3	21.5	10.9	1.3							67.2
110		1.9	2.5	3.1	14.3	30.3								52.2
115		0.2	0.2	0.5		3.1								4.1
120														
SUM	491.4	488.2	1096.9	3221.5	2961.1	1431.6	727.0	273.1	54.8	12.3	2.1			10960.1

	MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT						SUM	BY ALTITUDE			SUM			
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	82.5	97.5	217.5	340.2	295.2	162.1	127.3	62.8	15.3	0.9				1401.3
40	108.0	111.4	150.9	183.0	254.6	238.0	193.4	77.9	5.0					1322.1
60	50.1	45.8	99.4	130.6	223.3	155.5	99.5	41.0	6.0					855.2
65	52.4	44.9	126.0	182.2	251.5	266.7	86.5	12.5	0.6					1023.3
70	69.2	63.4	158.5	172.6	169.7	251.1	67.9	10.3	0.1					962.9
75	60.3	67.9	178.9	239.1	158.3	155.4	55.3	8.2	0.1					923.7
80	52.2	66.0	220.7	306.9	209.8	104.5	27.1	3.1						990.1
85	53.0	57.8	223.9	377.6	322.3	61.2	9.6	0.7						1106.2
90	51.9	48.5	192.6	493.4	393.2	92.1	6.0	0.7						1268.5
95	16.3	24.5	97.4	183.3	292.8	84.1	7.8							706.3
100	6.3	14.0	37.0	63.8	117.0	37.2	1.9							277.1
105	2.0	4.1	4.2	15.5	25.4	15.8	0.2							67.2
110	0.1	1.0	1.8	4.7	3.9	38.6	2.0							52.2
115		0.2	0.2	0.3	0.2	2.6	0.5							4.1
120														
SUM	604.3	650.9	1699.3	2693.1	2717.2	1665.0	685.0	217.3	27.2	0.9				10960.1

TABLE VIII. TIME FOR ENGINE TORQUE VERSUS ROTOR RPM  
BY MISSION SEGMENT, RATE OF CLIMB AND  
OUTSIDE AIR TEMPERATURE, SAMPLE I

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -1500, BY OAT														80
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180														
185						0.1							0.1	
190														
195														
200														
205														
SUM						0.1							0.1	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -1500 , BY OAT														80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185							0.1							0.1
190														
195														
200														
205														
SUM							0.1							0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -1500, BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180														
185						0.1							0.1	
190														
195														
200														
205														
SUP						0.1							0.1	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -1500 , BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180														
185						0.1							0.1	
190														
195														
200														
205														
SUP						0.1							0.1	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY OAT														50
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180				0.1									0.1	
185			0.1										0.1	
190		0.1											0.1	
195														
200														
205														
SUM		0.1	0.1	0.1									0.3	

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY QAT 50													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.1
185				0.1									0.1
190		0.1											0.1
195													
200													
205													
SUM		0.1		0.2									0.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY QAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180						0.1								0.1
185			0.3											0.3
190			0.3											0.3
195														
200														
205														
SUM			0.5			0.1								0.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY QAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.1								0.1
185			0.3										0.3
190			0.3										0.3
195													
200													
205													
SUM			0.5		0.1								0.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY QAT 70														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS														
180					0.2									0.2
185	0.1			0.2	0.3									0.5
190				0.1										0.1
195														
200														
205														
SUP	0.1			0.2	0.5									0.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY QAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180					0.2								0.2
185	0.1	0.2		0.2	0.1								0.5
190				0.1									0.1
195													
200													
205													
SUM	0.1	0.2		0.2	0.3								0.8



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY OAT													80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180								0.2						0.2
185				0.1	0.2			0.1						0.4
190														
195														
200														
205														
SUP				0.1	0.2			0.3						0.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180						0.2							0.2
185		0.1	0.2			0.1							0.4
190													
195													
200													
205													
SUP		0.1	0.2			0.3							0.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY OAT													90	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1										0.1
185	0.1			0.1				0.1	0.1					0.4
190		0.1												0.1
195														
200														
205														
SUP	0.1	0.1		0.2				0.1	0.1					0.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY OAT													90	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1										0.1
185		0.1		0.1			0.1	0.1						0.4
190	0.1													0.1
195														
200														
205														
SUP	0.1	0.1		0.2			0.1	0.1						0.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY OAT													SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1	0.1	0.1		0.2						0.7
185	0.2		0.3	0.5	0.5			0.2	0.1					1.7
190		0.1	0.4	0.1										0.5
195														
200														
205														
SUP	0.2	0.1	0.6	0.6	0.4	0.1		0.4	0.1					2.9

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1	0.1	0.3	0.2							0.7
185	0.1	0.1	0.3	0.6	0.3	0.1	0.2	0.1					1.7
190	0.1		0.1	0.3	0.1								0.5
195													
200													
205													
SUM	0.2	0.1	0.4	0.9	0.4	0.4	0.4	0.1					2.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.3										0.3
180				0.1										0.1
185														
190														
195														
200														
205														
SUP				0.4										0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.3									0.3
180				0.1										0.1
185														
190														
195														
200														
205														
SUM				0.1	0.3									0.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT													60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.2			0.8	0.3	0.3	0.1							1.7
185			0.2	1.1	1.0			0.1	0.1					2.5
190														
195														
200														
205														
SUM	0.2		0.2	1.9	1.3	0.3	0.1	0.1	0.1					4.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.2			0.6	0.5	0.4								1.7
185				1.1	0.9	0.4	0.1	0.1						2.5
190														
195														
200														
205														
SUM	0.2			1.7	1.4	0.8	0.1	0.1						4.2

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1									0.1
180	0.1	0.1		0.8	1.5	0.2	0.1		0.3					3.1
185		0.1	0.8	2.0	3.2	0.8	0.5	0.2	0.1					9.0
190				0.3	0.2		0.1							0.6
195														
200														
205														
SUM	0.1	0.2	0.8	3.9	5.0	1.0	1.1	0.2	0.4					12.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT 70														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180		0.4	0.3	0.6	0.9	0.4	0.1	0.1	0.2					0.1
185	0.1	0.9	0.9	1.5	3.1	1.8	0.4	0.3						3.1
190				0.1	0.2	0.3								9.0
195														0.6
200														
205														
SUP	0.1	1.4	1.2	2.2	4.3	2.5	0.5	0.4	0.2					12.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1	0.1								0.2
180		0.1		0.3	0.7	0.7	0.2	0.1	0.1					2.3
185		0.2	0.1	0.6	1.1	0.8	0.1	0.5	0.3					3.7
190		0.1		0.2	0.1			0.2	0.1	0.1				0.8
195														
200														
205														
SUP		0.4	0.1	1.1	2.0	1.6	0.3	0.8	0.5	0.1				7.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.1	0.1							0.2
180	0.1			0.2	0.9	0.6	0.3	0.1						2.3
185	0.1	0.2	0.1	0.6	0.7	1.2	0.3	0.5						3.7
190	0.1			0.1	0.2		0.1	0.3						0.8
195														
200														
205														
SUP	0.3	0.2	0.1	0.9	1.8	1.9	0.8	0.9						7.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS								0.2						0.2
180		0.1		0.1	0.3	0.6	0.1	0.2	0.1	0.1				2.1
185	0.2		0.2	0.8	1.0	0.8	1.2	0.6	0.3					5.2
190					0.1	0.0		0.0	0.0					0.2
195								0.0						0.0
200														
205														
SUM	0.2	0.1	0.2	0.9	1.9	1.5	1.3	1.1	0.4	0.1				7.7

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT														90
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.3	1.0	0.3	0.2	0.1	0.1					0.2
185	0.2		0.1	1.2	0.8	1.4	0.4	0.8	0.1					2.1
190				0.1		0.0		0.0	0.1					5.2
195								0.0	0.0					0.2
200									0.0					0.0
205														
SUP	0.2		0.1	1.7	1.8	1.8	0.7	1.2	0.3					7.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.3	0.3		0.3	0.2	0.1		0.2						0.8
185	0.2	0.3	1.4	2.1	3.3	1.8	0.5	0.3	0.5	0.1				9.1
190		0.1		5.4	6.3	2.4	2.2	1.4	0.8					20.3
195				0.5	0.4	0.0	0.1	0.2	0.1	0.1				1.6
200								0.0						0.0
205														
SUP	0.5	0.7	1.4	8.2	10.2	4.4	2.8	2.2	1.4	0.2				32.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.3	0.4	0.3	1.8	3.4	1.8	0.6	0.3	0.3					9.1
185	0.4	1.2	1.1	4.4	5.4	4.8	1.2	1.7	0.1					20.3
190	0.1			0.3	0.4	0.3	0.1	0.3	0.0					1.6
195									0.0					0.0
200														
205														
SUP	0.8	1.6	1.4	6.5	9.6	7.0	2.1	2.6	0.5					32.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT														50
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				4.5	12.1	4.3								0.3
185			0.6	7.8		0.1								20.8
190			1.2	4.5										8.5
195														5.7
200														
205														
SUP			1.8	16.8	12.3	4.4								35.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300 , BY OAT														50
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.3									0.3
185			1.6	1.1	7.8	10.3								20.8
190			5.5	1.1	1.4	0.1								8.5
195			4.6	1.1										5.7
200														
205														
SUP			11.7	3.3	9.7	10.4								35.4

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT													60
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1	0.5									0.6
180	7.2	0.4	6.2	13.2	18.9	10.5	3.1	0.3					59.8
185	1.5	3.2	8.9	35.6	36.4	11.3	6.4	0.9	0.1				104.4
190			3.1	17.6	16.2	8.7	1.2	0.6					47.5
195				0.1									0.1
200													
205													
SUM	8.7	3.6	18.3	66.6	72.0	30.5	10.7	1.8	0.1				212.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT													60
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.1	0.5								0.6
180	7.2	4.8	1.8	11.9	10.0	18.4	3.5	2.3					59.8
185	1.5	0.1	21.6	24.4	33.9	20.6	2.3						104.4
190			8.1	12.4	19.1	7.8	0.1						47.5
195			0.1										0.1
200													
205													
SUM	8.7	4.9	31.5	48.7	63.1	47.2	5.9	2.3					212.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT													70
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.4	0.3	0.8								1.5
180	6.6	1.6	2.8	10.4	20.4	11.2	9.0	1.0	0.6	0.2	0.2		64.3
185	4.2	1.6	9.4	36.9	76.6	46.6	18.5	3.7	1.0	0.2	0.3		199.1
190		0.1	0.7	8.1	13.3	21.8	9.8	1.9	0.2				55.7
195			0.5	0.1			0.1						0.7
200													
205													
SUM	10.9	3.3	13.4	55.9	110.6	80.4	37.4	6.6	1.8	0.4	0.5		321.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT													70
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.4	0.3	0.8								1.5
180	6.4	0.8	7.0	10.3	13.8	16.2	5.4	3.9	0.4				64.3
185	4.1	1.0	35.4	37.6	33.1	56.5	28.3	2.9	0.1				199.1
190			3.7	7.6	14.8	20.5	8.0	1.1					55.7
195			0.5	0.1			0.1						0.7
200													
205													
SUM	10.6	1.8	46.6	56.0	62.0	94.0	41.8	7.9	0.5				321.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT													80
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1	0.2									0.6
180	2.0		4.7	19.4	10.7	5.0	3.6	0.1	0.1	0.1			48.3
185	1.4	2.6	5.6	19.6	30.4	26.0	21.1	4.2	2.1	0.4	0.3		113.8
190	0.3	0.2	1.7	4.2	7.9	5.5	4.0	1.0	1.0				25.8
195					0.8		0.1						0.9
200													
205													
SUM	4.0	2.8	9.8	28.7	58.7	42.2	30.2	8.9	3.3	0.5	0.4		189.4

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3			0.1		0.2								0.6
180	2.0	1.6	6.9	6.5	13.1	10.1	4.9	2.9		0.1				48.3
185	1.2	5.6	11.8	15.9	29.4	30.3	14.0	4.6	0.9					113.8
190	0.8		2.3	6.4	4.9	5.2	3.4	2.5	0.3					25.8
195				0.4	0.4	0.1								0.9
200														
205														
SUM	4.4	7.2	21.0	29.4	47.8	45.9	22.4	9.9	1.3	0.1				189.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.1				0.3								0.4
180	1.2	1.8	1.4	2.9	4.9	5.1	4.6	3.1	0.7	0.1				25.8
185	1.9	1.7	6.8	13.1	14.2	24.3	8.0	7.1	4.1	1.1				82.2
190	1.1		1.3	2.4	7.0	3.5	0.8	1.6	0.9	0.6				19.2
195									0.2					0.2
200														
205														
SUM	4.2	3.6	9.5	18.4	26.1	33.2	13.4	11.8	5.9	1.8				127.8

MINUTES FOR TGRQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.3	0.1							0.4
180	0.8	1.3	3.9	5.0	5.4	4.3	3.5	1.3	0.3					25.8
185	0.8	1.3	9.9	12.6	26.7	14.2	9.6	6.3	0.8					82.2
190	0.2		3.2	6.8	3.5	1.9	0.4	3.1	0.1					19.2
195									0.2					0.2
200														
205														
SUM	1.8	2.6	17.0	24.4	35.6	20.6	13.6	10.7	1.4					127.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3	0.1		0.6	1.3	1.1								3.3
180	17.1	3.9	13.0	35.7	75.8	41.7	21.7	8.0	1.4	0.4	0.3			219.0
185	9.0	9.1	31.3	113.1	157.5	108.3	54.0	16.0	7.3	1.7	0.6			508.0
190	1.4	0.2	8.1	36.9	44.3	39.6	15.7	5.1	2.1	0.6				154.0
195			0.5	0.2	0.6		0.2		0.2					1.9
200														
205														
SUP	27.7	13.3	52.8	186.5	279.7	190.7	91.7	29.1	11.1	2.7	0.9			886.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300 , BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3			0.5	0.7	1.8	0.1							3.3
180	16.5	8.5	21.2	34.9	50.1	59.3	17.3	10.4	0.7	0.1				219.0
185	7.7	8.0	84.2	91.6	124.9	121.6	54.3	13.8	1.8					508.0
190	1.0		21.9	34.5	42.7	35.3	11.9	6.6	0.4					154.0
195			0.6	0.5	0.4	0.1	0.1		0.2					1.9
200														
205														
SUM	25.4	16.5	128.0	161.7	218.7	216.2	83.7	30.9	3.2	0.1				886.2

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														300,	BY OAT	50
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS																
180				0.5	3.4	1.5								5.4		
185			1.2	1.5	0.1									2.8		
190				0.2										0.2		
195																
200																
205																
SUP			1.2	2.2	3.5	1.5								8.5		

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														300 ,	BY	OAT	50
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS																	
180				0.5	3.5	1.4								5.4			
185			2.2	0.6	0.1									2.8			
190				0.2										0.2			
195																	
200																	
205																	
SUP			2.2	1.2	3.6	1.4								8.5			

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														300,	BY	OAT	60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS					0.1									0.1			
180	1.9		2.8	8.0	6.2	4.5	2.2							25.6			
185	0.8	1.3	3.1	21.9	22.5	3.1	1.8	3.0						57.6			
190			0.5	8.0	4.5	2.6		0.1						15.8			
195					0.4									0.4			
200																	
205																	
SUM	2.6	1.3	6.5	37.9	33.9	10.2	4.0	3.1						99.5			

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										300 ,	BY	OAT	60	
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180				0.1									0.1	
185	1.9	1.3	1.0	7.4	5.6	6.0	2.4						25.6	
190	0.8		18.5	13.6	15.3	8.1	1.4	0.1					57.6	
195			7.6	3.0	2.8	2.3	0.1						15.8	
200					0.4								0.4	
205														
SUP	2.6	1.3	27.0	24.0	24.1	16.4	3.9	0.1					99.5	

MINUTES FOR TORQUE, VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														300,	BY OAT	70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS	0.3			0.2	0.4	0.5	0.1							1.7		
180	4.6	0.2	1.7	9.6	15.9	10.7	7.7	2.3	1.4					54.1		
185	3.0	0.1	3.7	29.5	43.7	41.5	26.0	10.6	0.9	3.4				159.4		
190		0.5	1.9	9.4	18.5	19.1	18.6	4.4						72.3		
195					1.3	1.4	0.1	0.8						3.6		
200																
205																
SUP	7.9	0.8	7.3	48.7	80.7	73.1	52.6	18.1	2.3	0.4				291.1		

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB													300 ,	BY	OAT	70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS	0.3		0.2	0.2		0.2	0.2							1.7		
180	4.7	5.0	4.3	6.0	9.8	10.6	9.2	4.6						54.1		
185	4.1	1.6	15.7	20.7	31.9	38.5	35.8	10.4	0.8					159.4		
190			6.5	9.8	9.9	21.4	21.4	3.3						72.3		
195				0.4		1.4	1.8							3.6		
200																
205																
SUM	9.0	6.6	26.6	37.2	51.5	72.1	69.0	18.3	0.8					291.1		

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1					0.2								0.3
180	2.9	0.1	0.2	1.9	12.7	13.0	9.0	3.4	0.1	0.1				43.4
185	0.6	0.5	3.9	13.4	24.6	32.0	30.5	11.0	1.8					118.4
190		0.4	0.8	5.0	9.1	3.9	15.1	2.7	0.7	0.3				38.1
195						0.6	0.1	0.1						0.8
200														
205														
SUM	3.6	1.0	4.9	20.4	46.5	49.6	54.7	17.2	2.6	0.4				200.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										300 ,	BY OAT			80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1	0.1	0.1							0.3
180	3.0	0.6	3.8	2.8	6.9	12.0	11.8	2.1	0.4					43.4
185	1.1	2.7	7.7	10.0	23.6	36.0	25.7	10.7	0.8					118.4
190			2.2	2.3	9.4	8.6	8.7	6.7	0.1					38.1
195							0.5	0.3						0.8
200														
205														
SUM	4.1	3.3	13.7	15.1	39.9	56.8	46.7	19.9	1.3					200.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1	0.2	0.1	0.3						0.7
180		0.4	0.1	1.5	5.5	3.0	12.4	3.9	0.6					27.5
185	0.4	0.8	1.6	6.2	18.9	18.5	18.3	13.4	7.3	1.0				86.3
190	0.1			1.1	4.2	1.8	3.5	1.9	1.1					13.7
195						0.1	0.6	0.2						0.9
200														
205														
SUM	0.5	1.1	1.7	8.9	28.7	23.6	34.8	19.7	9.0	1.0				129.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										300 , BY OAT				90
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.4		0.3							0.7
180		0.2	2.0	1.3	4.5	5.0	12.4	2.0	0.1					27.5
185	0.9	0.7	3.9	12.9	13.9	16.5	21.5	12.7	3.3					86.3
190		0.1	3.1	1.5	3.7	2.0	2.2	4.0						13.7
195						0.1		0.8						0.9
200														
205														
SUM	0.9	1.0	6.0	15.7	22.5	23.6	36.5	19.5	3.4					129.0



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300,											BY OAT		SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.4			0.2	0.5	0.9	0.2	0.3						2.8
180	9.4	0.7	4.9	21.5	43.8	32.8	31.4	9.5	2.1	0.1				156.1
185	4.8	2.7	13.6	72.6	109.8	95.2	76.6	38.0	9.9	1.4				424.5
190	0.1	0.9	3.2	23.8	36.4	27.3	37.2	9.1	1.8	0.3				140.1
195					1.7	2.0	0.8	1.1						5.6
200														
205														
SUM	14.7	4.3	21.7	118.0	192.5	158.2	146.1	58.0	13.8	1.8				729.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										300 ,	BY	OAT	SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3		0.2	0.2	0.6	0.3	1.2							2.8
180	9.6	7.1	11.1	17.9	30.3	35.1	35.8	8.7	0.5					156.1
185	6.9	5.1	47.9	57.8	84.7	99.1	84.4	33.9	4.9					424.5
190		0.1	16.4	16.9	25.8	34.3	32.5	14.0	0.1					140.1
195				0.4	0.4	1.5	2.3	1.1						5.6
200														
205														
SUP	16.7	12.3	75.5	93.2	141.9	170.2	156.1	57.7	5.5					729.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.5									0.5
180				0.3	1.7	0.5								2.5
185			0.1			0.4								0.5
190														
195														
200														
205														
SUM			0.1	0.3	2.2	0.9								3.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.5									0.5
180					0.9	1.6	0.1							2.5
185				0.1		0.4								0.5
190														
195														
200														
205														
SUM				0.1	1.3	1.9	0.1							3.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT													60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.0									0.0
180	1.3			4.1	7.3	5.9	5.1	0.7						24.4
185	0.3		1.1	10.3	7.7	2.2	2.9							24.5
190				3.3	1.0	2.3								6.5
195														
200														
205														
SUM	1.6		1.1	17.6	16.0	10.4	9.0	0.7						55.5

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														600 ,	BY	OAT	60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180	1.3		0.4	3.1	8.1	3.6	7.2	0.6						0.0			
185	0.2		4.8	6.2	7.5	3.4	2.4							24.4			
190			1.9	1.9	1.7	1.0								24.9			
195														6.5			
200																	
205																	
SUM	1.5		7.2	11.2	17.3	8.0	9.6	0.6						55.5			

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														600 ,	BY	OAT	70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180	4.7	0.2	0.7	8.2	7.8	7.6	8.1	5.1	0.9					1.3			
185	1.2		3.0	11.6	25.4	29.2	15.3	5.3	2.2	0.6				43.3			
190	0.2	2.4	0.1	5.5	9.1	8.8	7.3	4.4	0.4					93.7			
195							0.7	0.1						38.1			
200														0.8			
205																	
SUM	6.1	2.6	4.0	25.2	42.7	46.3	31.3	14.9	3.5	0.6				177.2			

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														600 ,	BY	OAT	70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180	4.8	1.2	1.1	0.2	5.7	0.5	0.6							1.3			
185	1.2	0.8	10.9	11.1	19.8	20.8	19.5	9.0	0.6					43.3			
190			4.1	2.3	12.9	7.4	8.2	3.4						93.7			
195							0.8							38.1			
200														0.8			
205																	
SUM	6.0	2.0	16.1	20.6	38.3	38.5	37.9	15.4	2.4					177.2			

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														600 ,	BY	OAT	80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180	1.7			2.0	7.5	8.6	8.7	8.4	0.5					37.3			
185	0.7		1.2	6.2	17.1	24.5	34.0	14.2	2.6	1.2	0.1			101.8			
190				5.4	6.9	7.2	6.4	6.6	0.2					34.8			
195				0.2	1.3	0.1	2.1	0.1						3.8			
200																	
205																	
SUM	2.4		1.2	13.8	32.8	40.4	53.2	29.2	3.4	1.2	0.1			177.7			

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														600 ,	BY	OAT	80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180	1.6		1.8	3.5	6.4	9.0	9.2	2.6	3.1					37.3			
185	0.3	0.6	4.2	5.0	17.4	22.9	28.6	20.1	2.7					101.8			
190			2.8	0.9	9.4	5.8	7.6	7.8	0.5					34.8			
195				1.3		0.2	2.2	0.1						3.8			
200																	
205																	
SUM	1.9	0.6	5.8	10.8	33.2	38.0	47.5	30.6	6.3					177.7			

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.3	0.1							0.4
180				2.0	3.9	4.0	12.3	4.2	0.1					26.6
185		0.1	1.7	8.1	11.0	13.6	23.4	15.3	1.8	0.5				75.7
190			0.2	1.4	2.0	2.7	1.3	5.5	1.3					14.5
195							0.4	0.2	0.2					0.8
200														
205														
SUM		0.1	1.9	11.6	17.0	20.6	37.6	25.2	3.5	0.5				118.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														600 ,	BY	OAT	90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS							0.4							0.4				
180	0.1	0.1	1.5	0.4	4.1	6.6	12.5	1.4						26.6				
185		0.2	5.8	5.9	13.8	21.0	12.6	14.0	2.2					75.7				
190		0.2	0.1	0.6	3.4	2.2	4.4	3.2	0.4					14.5				
195								0.8						0.8				
200																		
205																		
SUP	0.1	0.5	7.4	7.0	21.2	29.7	30.0	19.4	2.6					118.0				

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS		0.2		1.0	0.9	0.1							2.2	
180	7.7	0.2	0.7	16.6	28.2	26.6	34.2	18.4	1.6				134.1	
185	2.2	0.1	7.2	36.2	61.1	69.8	75.7	34.8	6.6	2.3	0.1		296.2	
190	0.2	2.4	0.3	15.6	19.0	21.1	17.1	16.5	1.9				93.9	
195				0.2	1.3	0.1	3.2	0.4	0.2				5.4	
200														
205														
SUM	10.1	2.7	8.4	68.6	110.7	118.5	130.2	70.1	10.3	2.3	0.1		531.8	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2	0.5	0.5	1.0							2.2
180	7.8	1.3	4.8	14.0	25.1	30.5	37.8	7.7	4.9					134.1
185	1.7	1.6	25.7	28.3	58.5	68.5	63.1	43.1	5.6					296.2
190		0.2	6.9	5.8	27.3	16.3	20.2	14.4	0.9					93.9
195				1.3		0.2	3.0	0.9						5.4
200														
205														
SUP	9.5	3.2	39.4	49.7	111.4	116.1	125.1	66.1	11.4					531.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 900, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.0									0.0
180					0.0									0.0
185				0.4										0.4
190				0.5	0.1									0.6
195														
200														
205														
SUM				0.9	0.2									1.1

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 900 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.0									0.0
180					0.0									0.0
185			0.4											0.4
190			0.5		0.1									0.6
195														
200														
205														
SUP			0.9		0.2									1.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 900, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.9									0.9
180	1.2				4.3	1.5	3.2	0.2						13.2
185			0.7	2.0	2.3	5.0	1.6	0.9	0.3					13.7
190				0.1	0.2	0.8								1.1
195														
200														
205														
SUP	1.2		0.8	5.5	7.7	7.4	4.8	1.2	0.3					28.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 900 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.9	0.1								0.9
180	1.2		0.6	2.8	4.6	2.3	1.2	0.5						13.2
185			2.4	1.0	6.1	2.1	2.1							13.7
190				0.1	0.3	0.7								1.1
195														
200														
205														
SUP	1.2		3.0	3.9	11.9	5.2	3.3	0.5						28.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 900, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				1.5		1.1								2.5
180	3.8		0.3	6.2	4.2	6.2	6.5	3.6						30.8
185	1.7		1.6	12.9	17.1	16.3	8.4	3.2	1.3	0.1				62.5
190				2.7	5.8	11.4	2.8	0.6						23.4
195														
200														
205														
SUP	5.5		1.8	23.3	27.1	35.1	17.7	7.4	1.3	0.1				119.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB											900 ,	BY	OAT	70	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS				1.5	0.5		0.6							2.5	
180	3.8		1.9	3.6	5.3	5.2	8.4	2.5	0.1					30.8	
185	1.7	0.7	6.2	7.9	14.6	18.3	10.5	2.5	0.1					62.5	
190			1.5	1.9	10.9	5.9	3.2							23.4	
195															
200															
205															
SUP	5.5	0.7	9.6	14.8	31.3	29.3	22.7	5.0	0.3					119.3	

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900,	BY	OAT	80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.1	0.1							0.1
180	0.2			0.9	4.1	9.0	5.3	2.6	0.1					22.2
185	0.9	0.2	1.9	4.8	16.3	17.8	16.1	8.5	1.3					67.8
190				3.2	2.5	9.5	4.9	2.5	0.1					22.7
195			0.2	0.1	7.1	0.2								0.6
200														
205														
SUM	1.1	0.2	2.1	9.0	22.9	36.6	26.4	13.6	1.5					113.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB													900 ,	BY	OAT	80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
180	0.3			0.1	0.1	10.3	4.6	2.3						0.1		
185	0.9	0.1	2.0	3.8	16.9	21.8	14.7	7.6						22.2		
190		0.7	0.8	1.0	5.7	7.3	5.6	1.6						67.8		
195			0.2	0.1	0.1		0.2							22.7		
200														0.6		
205																
SUM	1.2	0.8	3.0	6.6	26.0	39.4	25.1	11.4						113.4		

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB													900,	BY	OAT	90
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
180	0.1			1.8	3.7	5.6	6.8	1.1	0.1	0.1				0.5		
185	0.1	0.3	0.1	4.0	6.6	10.0	13.5	11.6	0.9	1.8				19.3		
190			0.4	3.2	2.2	2.5	0.4	0.4	0.1					49.0		
195				0.5										9.2		
200														0.5		
205																
SUM	0.2	0.3	0.5	9.4	12.6	18.2	20.6	13.4	1.1	1.9				78.5		

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB													900 ,	BY	OAT	90
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS						0.3	0.2							0.5		
180		0.1	0.2	1.7	2.5	6.2	7.3	1.4						19.3		
185		0.1	1.9	2.8	6.0	12.2	13.6	10.1	2.3					49.0		
190			0.5	0.4	3.7	1.9	2.3	0.3						9.2		
195					0.5									0.5		
200																
205																
SUM		0.2	2.7	4.9	12.7	20.5	23.5	11.8	2.3					78.5		

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB													900,	BY	OAT	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
180	5.3		1.0	10.9	16.4	22.3	21.8	7.5	0.2	0.1				4.2		
185	2.7	0.5	3.7	25.5	42.3	49.2	39.6	24.2	3.9	1.9				85.5		
190			0.4	9.8	10.8	24.3	8.1	3.5	0.2					193.4		
195			0.2	0.6	0.1	0.2								57.0		
200														1.1		
205																
SUM	8.0	0.5	5.3	48.2	70.5	97.3	69.7	35.5	4.2	2.0				341.2		

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 900 , BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	5.3	0.1	2.7	1.5	1.5	0.4	0.8							4.2
185	2.6	0.9	12.7	15.5	43.5	54.4	40.9	6.6	0.1					85.5
190		0.7	3.3	3.4	20.8	15.7	11.2	1.9	2.4					193.4
195			0.2	0.1	0.6		0.2							57.0
200														1.1
205														
SUP	7.9	1.7	17.2	30.2	82.7	94.4	74.6	28.7	2.6					341.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 60														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	1.1		0.2	0.3	4.4	1.0	1.0							8.0
185		0.2	0.4	0.8	1.3	3.2	0.2	0.1						6.2
190				0.3	0.3									0.6
195														
200														
205														
SUP	1.1	0.2	0.6	1.5	6.0	4.2	1.2	0.1						14.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200 , BY OAT 60														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	1.1			0.9	4.9	1.1	0.1							8.0
185			0.9	0.8	1.6	2.1	0.9							6.2
190			0.2	0.1	0.3									0.6
195														
200														
205														
SUP	1.1		1.1	1.8	6.7	3.1	1.0							14.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	1.6			1.1	3.5	8.0	1.4	0.7						0.1
185	0.7		0.6	5.4	6.8	9.5	4.0	2.0	0.1					16.4
190				1.0	3.0	9.9	1.1	0.2						29.1
195				0.0	0.1	0.2								15.1
200														0.3
205														
SUP	2.3		0.6	7.5	13.4	27.7	6.5	2.9	0.1					61.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200 , BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	1.6		0.2	0.9	5.1	6.3	1.9	0.2	0.1					0.1
185	0.7		2.1	3.0	8.5	9.4	3.8	0.8						16.4
190			0.6	0.9	5.7	6.6	1.0	0.3						29.1
195					0.1	0.2								15.1
200														0.3
205														
SUP	2.3		0.6	4.8	19.5	22.6	6.7	1.4	0.1					61.0

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 80												SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	
LESS					0.2							0.2
180	0.4	0.1	0.0	0.4	2.5	4.0	1.3	0.7	0.1			9.6
185	0.1	0.1	0.1	3.2	9.2	12.1	6.8	1.6				33.3
190			0.1	0.6	1.4	4.4	3.3	1.7	0.1			11.6
195				0.2								0.2
200												
205												
SUP	0.5	0.2	0.2	4.4	13.3	20.7	11.4	4.1	0.2			54.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 80												SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	
LESS						0.2						0.2
180	0.4		0.3	1.6	2.2	3.4	0.8	0.8	0.1			9.6
185	0.2		0.9	1.0	7.2	13.8	7.6	2.5				33.3
190			0.3	0.2	3.1	6.5	0.7	0.8				11.6
195					0.2							0.2
200												
205												
SUP	0.6		1.5	2.9	12.7	23.7	9.2	4.1	0.1			54.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 90												SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	
LESS								0.3				0.3
180			0.1	0.2	2.1	5.2	0.9	0.8				9.3
185			0.3	1.7	5.4	11.7	6.8	5.4	0.7	1.8		33.9
190				1.7	1.5	4.1	1.4	0.5	0.7			10.0
195												
200												
205												
SUP		0.4	3.6	9.1	21.0	9.2	6.7	1.7	1.8			53.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 90												SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	
LESS						0.3						0.3
180	0.2		0.1	0.4	1.7	3.7	2.5	0.7				9.3
185	0.1	0.1	0.5	1.1	6.5	12.8	7.9	4.7	0.1			33.9
190				2.6	1.9	4.3	0.7	0.5	0.0			10.0
195												
200												
205												
SUP	0.3	0.1	0.6	4.1	10.1	20.7	11.5	5.9	0.2			53.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT SUM												SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	
LESS					0.3			0.3				0.6
180	3.1	0.1	0.3	2.0	12.4	18.2	4.6	2.2	0.1			43.3
185	0.8	0.3	1.4	11.1	22.8	36.5	17.8	9.1	0.8	1.8		102.5
190			0.1	3.6	6.1	18.4	5.8	2.4	0.8			37.3
195				0.2	0.1	0.2						0.5
200												
205												
SUP	4.0	0.4	1.9	17.0	41.8	73.6	28.2	13.7	2.0	1.8		184.3

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200 , BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	3.3		5.6	3.8	13.4	14.4	5.3	1.7	0.2					43.3
185	4.0	0.1	5.1	5.9	23.7	38.1	20.2	8.1	0.1					102.5
190			1.1	3.8	11.0	17.4	2.4	1.6	0.0					37.3
195					0.3	0.2								0.5
200														
205														
SUM	4.4	0.1	6.8	13.6	49.1	70.2	28.4	11.4	0.4					184.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500 , BY OAT														50
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180						0.3								0.3
185				0.2										0.2
190														
195														
200														
205														
SUM				0.2		0.3								0.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500 , BY OAT														50
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180						0.3								0.3
185			0.2											0.2
190														
195														
200														
205														
SUM			0.2			0.3								0.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500 , BY OAT														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					1.1	1.3	0.9							3.3
185				0.2	0.8									1.0
190				0.1										0.1
195														
200														
205														
SUM				0.3	2.0	1.3	0.9							4.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500 , BY OAT														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					1.9	0.4	1.1							3.3
185				0.2	0.8									1.0
190			0.1											0.1
195														
200														
205														
SUM			0.1	0.2	2.7	0.4	1.1							4.4



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					0.2								0.2
180	0.7		0.6	1.4	2.3	2.5		0.1					7.7
185	0.3	0.1	0.2	1.6	3.2	2.1	0.1						7.6
190			0.6	1.1	0.7	0.4	0.2						3.0
195					0.2								0.2
200													
205													
SUP	4.0	0.1	1.4	4.2	6.6	5.0	0.3	0.1					18.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS						0.2							0.2
180	0.7		0.2	2.9	2.8	1.1	0.2						7.7
185	0.3	0.2	0.4	2.4	2.1	2.2	0.1						7.6
190		0.1		2.0	0.7	0.2							3.0
195					0.2								0.2
200													
205													
SUP	4.0	0.3	0.5	7.2	5.7	3.6	0.3						18.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					0.3								0.3
180				0.1	2.9	2.3	0.2						5.5
185		0.1	1.9	3.4	6.4	5.2	1.7						18.7
190			0.4	2.6	2.4	0.5	0.2						6.1
195						0.1							0.1
200													
205													
SUP		0.1	2.3	6.1	12.0	8.1	2.1						30.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					0.1	0.2							0.3
180			0.1	1.4	3.4	0.5	0.2						5.5
185		0.1	1.5	6.4	4.8	5.1	0.9						18.7
190		0.3	0.1	3.9	0.8	1.0							6.1
195						0.1							0.1
200													
205													
SUP		0.4	1.7	11.6	9.0	6.9	1.1						30.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180			0.4	0.4	3.1	1.4	0.3						5.5
185	0.1	0.1	0.7	4.1	4.2	4.2	0.6						14.0
190			0.1	0.5	1.4	0.7	0.1						2.9
195													
200													
205													
SUP	0.1	0.1	1.2	5.1	8.7	6.3	1.0						22.5

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500 , BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.1	0.1	0.5	2.5	2.2	0.1						5.5
185		0.2	0.2	2.4	7.7	2.7	0.8						14.0
190			0.1	0.3	1.6	0.4	0.5						2.9
195													
200													
205													
SUM		0.3	0.4	3.2	11.8	5.3	1.4						22.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.5								0.5
180	0.7			1.0	3.1	9.8	7.1	0.5	0.1					22.3
185	0.4	0.1	0.2	3.2	10.0	13.8	11.5	2.4						41.6
190				1.3	4.7	4.5	1.6	0.5						12.1
195						0.2	0.1							0.3
200														
205														
SUP	1.1	0.1	0.2	5.5	17.3	28.8	20.3	3.4	0.1					76.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500 , BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.1	0.4							0.5
180	0.7		0.1	0.4	6.5	9.3	4.9	0.5						22.3
185	0.3		0.7	2.2	12.1	14.5	9.9	1.8						41.6
190			0.5	0.2	6.2	3.1	1.6	0.5						12.1
195						0.2	0.1							0.3
200														
205														
SUM	1.0		1.3	2.8	24.7	27.2	16.9	2.8						76.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.1											0.1
190														
195														
200														
205														
SUM			0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.1											0.1
190														
195														
200														
205														
SUM			0.1											0.1

TABLE VIII - Continued

MINUTES FOR TORQUE, VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1									0.1
180				0.1	0.2	1.0								1.4
185				0.1		0.3	0.6		:					1.0
190														
195														
200														
205														
SUM				0.2	0.4	1.3	0.6							2.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1									0.1
180				0.1	0.9	0.3	0.1							1.4
185					0.4	0.3	0.3							1.0
190														
195														
200														
205														
SUM				0.1	1.4	0.6	0.4							2.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1			0.1	0.7	1.4	1.3	0.1						3.7
185	0.4			0.2	1.5	2.2	1.7							5.9
190					0.7	0.4	0.5	0.3						1.5
195														
200														
205														
SUM	0.4			0.3	2.5	4.1	3.4	0.4						11.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1				1.4	0.7	1.6							3.7
185	0.4		0.9	0.3	1.4	1.7	1.3							5.9
190						1.4	0.1							1.5
195														
200														
205														
SUM	0.4		0.9	0.3	2.9	3.8	2.9							11.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.1								0.1
180					0.1	0.6	0.2	0.1						1.0
185				0.6	2.0	4.8	4.2	0.0						11.7
190				0.3	1.1	1.5	1.3							4.3
195				0.0										0.0
200														
205														
SUM				1.0	3.2	7.0	5.7	0.1						17.1

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800 , BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.1							0.1
180				0.4	0.6								1.0
185		0.4	0.5	3.9	4.1	2.5	0.4						11.7
190		0.2	0.6	0.3	2.8	0.3							4.3
195					0.0								0.0
200													
205													
SUM		0.6	1.1	4.6	7.6	2.9	0.4						17.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180			0.1	0.9	0.5	1.3	0.3						3.1
185			0.1	0.9	3.0	2.4	2.4	0.4					9.1
190			0.1	0.1	0.2								0.4
195													
200													
205													
SUM			0.3	1.9	3.8	3.7	2.7	0.4					12.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800 , BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180		0.1	0.1		1.4	1.5							3.1
185	0.1		0.1	0.5	2.0	3.2	1.5	1.2					9.1
190					0.1	0.3							0.4
195													
200													
205													
SUM	0.1	0.1	0.2	0.5	2.1	4.9	3.4	1.2					12.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.1	0.1								0.2
180	0.1		0.3	1.9	3.6	2.8	0.5						9.3
185	0.4	0.1	1.0	4.5	10.3	8.5	2.4	0.4					27.8
190			0.4	1.5	2.2	1.8	0.3						6.2
195			0.0										0.0
200													
205													
SUM	0.4	0.1	1.8	7.8	16.2	13.5	3.2	0.4					43.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800 , BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.1	0.1								0.2
180	0.1	0.1	0.1	2.7	3.0	3.2							9.3
185	0.5		1.4	1.3	7.8	9.3	6.0	1.6					27.8
190		0.2	0.6	0.4	4.6	0.4							6.2
195					0.0								0.0
200													
205													
SUM	0.5	0.1	1.7	2.0	10.7	16.9	9.7	1.6					43.5

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1	0.1	0.9	0.1							1.2
185														
190														
195														
200														
205														
SUM				0.1	0.1	0.9	0.1							1.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.8		0.4							1.2
185														
190														
195														
200														
205														
SUM					0.8		0.4							1.2

MINUTES FOR TORQUE, VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.2				0.2	1.6	0.5							2.5
185				0.4	0.3	1.1	1.6							3.5
190				0.2		0.3	0.1							0.6
195														
200														
205														
SUM	0.2			0.6	0.5	3.1	2.3							6.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.2				1.1	1.0	0.2							2.5
185			0.1		1.4	1.6	0.3							3.5
190					0.3	0.3								0.6
195														
200														
205														
SUM	0.2		0.1		2.9	3.0	0.5							6.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180						0.1	0.2	0.1						0.4
195					0.5	3.7	4.2	0.7	0.2					9.2
190				0.1	0.7	0.4	0.6							1.3
195														
200														
205														
SUM				0.1	0.7	4.2	5.0	0.8	0.2					11.0

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.2		0.2							0.4
185				0.2	0.9	1.8	5.5	0.8						9.2
190			J.2	0.1		0.4	0.6							1.3
195														
200														
205														
SUM			J.2	0.3	1.1	2.3	6.2	0.8						11.0

MINUTES FOR TORQUE, VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1				0.1	0.7	0.7							1.5
185					0.5	1.6	2.7	2.3	0.6					7.8
190				0.6	0.2	0.3	0.3	0.2						1.6
195														
200														
205														
SUM	0.1			0.6	0.9	2.5	3.7	2.5	0.6					10.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1	0.4	1.							1.5
185					1.0	2.8	5.	0.3						7.8
190					0.2	0.5								1.6
195														
200														
205														
SUM					1.4	3.6	5.0	0.3						10.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.3			0.1	0.3	3.3	1.5	0.1						5.6
185				0.4	1.4	6.4	8.5	3.0	0.8					20.5
190				0.9	0.4	1.1	1.0	0.2						3.5
195														
200														
205														
SUM	0.3			1.4	2.0	10.7	11.0	3.3	0.8					29.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100 , BY CAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.2				2.2	1.4	1.8							5.6
185			0.1	0.2	3.4	6.3	9.5	1.1						20.5
190			0.2	0.1	1.1	1.2	0.9							3.5
195														
200														
205														
SUM	0.2		0.3	0.3	6.7	8.9	12.2	1.1						29.6

TABLE VIII - Continued

MINUTES FOR TORQUE. VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -2100, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1									0.1
185														
190														
195														
200														
205														
SUM					0.1									0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -2100 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1									0.1
185														
190														
195														
200														
205														
SUM					0.1									0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -2100, BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1									0.1
185														
190														
195														
200														
205														
SUM					0.1									0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -2100 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1									0.1
185														
190														
195														
200														
205														
SUM					0.1									0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1500, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.1												0.1
185														
190														
195														
200														
205														
SUM		0.1												0.1

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1500 ,														BY OAT	90	SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS																	
180		0.1															0.1
185																	
190																	
195																	
200																	
205																	
SUM		0.1															0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1500 ,														BY OAT	SUM		
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS																	
180	0.1																0.1
185																	
190																	
195																	
200																	
205																	
SUM	0.1																0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1500 ,														BY OAT	SUM		
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS																	
180		0.1															0.1
185																	
190																	
195																	
200																	
205																	
SUM		0.1															0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200 ,														BY OAT	60		
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS																	
180				0.1													0.1
185		0.2															0.2
190																	
195																	
200																	
205																	
SUM		0.2		0.1													0.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200 ,														BY OAT	60		
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS																	
180				0.1													0.1
185	0.1	0.1															0.2
190																	
195																	
200																	
205																	
SUM	0.1	0.1		0.1													0.3



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200, BY OAT														70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1			0.1							0.2
185														
190														
195														
200														
205														
SUM				0.1			0.1							0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200 , BY OAT														70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1		0.1								0.2
185														
190														
195														
200														
205														
SUM				0.1		0.1								0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200, BY OAT														80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1	0.1										0.2
185		0.1		0.1										0.2
190														
195														
200														
205														
SUM		0.1	0.1	0.2										0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200 , BY OAT														80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1		0.1									0.2
185			0.2											0.2
190														
195														
200														
205														
SUM			0.3		0.1									0.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200, BY OAT													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1	0.2	0.1		0.1							0.5
185		0.1	0.2	0.1										0.4
190														
195														
200														
205														
SUM		0.1	0.3	0.3	0.1		0.1							0.9

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200 , BY DAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180		0.1	0.1	0.1	0.1								0.5	
185	0.1	0.3											0.4	
190														
195														
200														
205														
SUM	0.1	0.4	0.1	0.2	0.1								0.9	

MINUTES FOR TORQUEL VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900, BY DAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.2										0.2
190														
195														
200														
205														
SUM				0.2										0.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900 , BY DAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185				0.2									0.2
190													
195													
200													
205													
SUM				0.2									0.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB														-900,	BY	DAT	70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS																	
180				0.2										0.2			
185																	
190																	
195																	
200																	
205																	
SUM				0.2										0.2			

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -700 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
				0.2										0.2
	180													
	185													
	190													
	195													
	200													
	205													
	SUM			0.2										0.2

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900, BY OAT														80	SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120			
180		0.2													0.2
185	0.1														0.1
190															
195															
200															
205															
SUM	0.1	0.2													0.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900, BY OAT														80	SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120			
180			0.2												0.2
185		0.1													0.1
190															
195															
200															
205															
SUM		0.1	0.2												0.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900, BY OAT														SUM	SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120			
180		0.2	0.2												0.4
185	0.1		0.2												0.3
190															
195															
200															
205															
SUM	0.1	0.2	0.4												0.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900, BY OAT														SUM	SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120			
180			0.4	0.2											0.4
185		0.1		0.2											0.3
190															
195															
200															
205															
SUM		0.1	0.4	0.2											0.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT														60	SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120			
180			0.5	0.3											0.8
185	0.2		0.8												1.0
190															
195															
200															
205															
SUM	0.2		1.3	0.3											1.8

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600 , BY OAT														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.4	0.4									0.8
185		0.2		0.4	0.2									1.0
190														
195														
200														
205														
SUM		0.2		0.8	0.7									1.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT														70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.8										0.8
185				0.8		0.3								1.1
190														
195														
200														
205														
SUM				1.6		0.3								1.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600 , BY OAT														70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.5	0.1	0.2									0.8
185		0.4		0.3	0.2	0.1								1.1
190														
195														
200														
205														
SUM		0.4	0.5	0.4	0.5	0.1								1.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT														80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1	0.4	0.1	0.9	0.1									1.6
185			0.1	0.7										0.8
190														
195														
200														
205														
SUM	0.1	0.4	0.2	1.6	0.1									2.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600 , BY OAT														80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.6	0.8	0.2									1.6
185			0.8											0.8
190														
195														
200														
205														
SUM			1.4	0.8	0.2									2.4

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1	0.4	0.1	2.2	0.4									3.2
185		0.2	0.1	2.3		0.3								2.9
190														
195														
200														
205														
SUM	0.1	0.6	0.2	4.5	0.4	0.3								6.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			1.1	1.3	0.8									3.2
185		0.6	0.8	0.8	0.6	0.1								2.9
190														
195														
200														
205														
SUM		0.6	1.9	2.0	1.4	0.1								6.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB													-300,	BY	OAT	60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS																	
180				0.2	0.2									0.4			
185			2.8	5.0	1.9									9.6			
190				0.3										0.3			
195																	
200																	
205																	
SUM			2.9	5.6	2.0									10.4			

MINUTES FOR TORQUE VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300 , BY OAT 60													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180			0.4										0.4
185		0.6	2.2	2.6	4.2								9.6
190				0.2									0.3
195													
200													
205													
SUM		0.6	2.2	3.1	4.5								10.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.3	3.5	0.6									4.4
185			0.6	14.2	4.1									18.9
190														
195														
200														
205														
SUM			0.9	17.7	4.7									23.3

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		1.7	2.3	0.1	0.8	0.5								4.4
185		0.9	3.0	0.1	7.9	7.1								18.9
190														
195														
200														
205														
SUM		2.6	4.4	0.2	8.5	7.6								23.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1		3.6	2.9	0.3									3.8
185	0.1		3.6	3.1	1.7									4.8
190														
195														
200														
205														
SUM	0.2		7.2	5.9	1.3									8.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			2.5	0.9	0.5									3.8
185			3.1	1.4	0.3									4.8
190														
195														
200														
205														
SUM			5.5	2.3	0.8									8.6

MINUTES FOR TORQUE, VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1	0.9	6.6	1.1									8.7
185	3.1	4.0	22.3	6.7									33.3
190			0.3										0.3
195													
200													
205													
SUM	0.2	4.9	29.2	8.7									42.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300 , BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	1.7	3.8	1.4	1.3	0.5								8.7
185	1.6	8.3	4.1	12.3	7.1								33.3
190				0.3									0.3
195													
200													
205													
SUM	3.2	12.1	5.6	13.9	7.6								42.3

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY DAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.2									0.2
185		0.3	0.7										1.0
190		0.1											0.1
195													
200													
205													
SUP		0.4	0.7	0.2									1.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300 , BY DAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1	0.1									0.2
185		0.3	0.6	0.1									1.0
190		0.1											0.1
195													
200													
205													
SUP		0.4	0.7	0.2									1.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY QAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1			0.1							0.2
185			0.8	0.1	0.3								1.2
190			0.1										0.1
195													
200													
205													
SUP			1.0	0.1	0.3	0.1							1.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300 , BY DAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.1			0.1								0.2
185		0.3		0.9									1.2
190			0.1										0.1
195													
200													
205													
SUP		0.4	0.1	0.9	0.1								1.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.6										
185	0.1	0.1		1.2	0.1									0.6
190														1.5
195														
200														
205														
SUP	0.1	0.1		1.9	0.1									2.2

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300 , BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180			0.1		0.5									0.6
185		0.1	0.9	0.3	0.3									1.5
190														
195														
200														
205														
SUP		0.1	1.0	0.3	0.8									2.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY OAT SUM														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180				0.7	0.2		0.1							1.0
185	0.1	0.1	0.3	2.8	0.2	0.3								3.8
190			0.1	0.1										0.2
195														
200														
205														
SUP	0.1	0.1	0.4	3.6	0.4	0.3	0.1							5.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300 , BY OAT SUM														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180			0.2	0.1	0.6	0.1								1.0
185		0.1	1.5	0.9	1.3									3.8
190			0.1	0.1										0.2
195														
200														
205														
SUP		0.1	1.8	1.0	1.9	0.1								5.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900, BY OAT 60														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180														
185			0.1											0.1
190														
195														
200														
205														
SUP			0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900 , BY OAT 60														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180														
185		0.1												0.1
190														
195														
200														
205														
SUP		0.1												0.1



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185		0.1	0.1										0.2
190		0.1											0.1
195													
200													
205													
SUP		0.1	0.1										0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185		0.1				0.1								0.2
190		0.1												0.1
195														
200														
205														
SUP		0.1				0.1								0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1										0.1
185		0.1											0.1
190													
195													
200													
205													
SUP		0.1	0.1										0.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900 , BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.1											0.1
185		0.1											0.1
190													
195													
200													
205													
SUP		0.2											0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1										0.1
185		0.3	0.1										0.4
190		0.1											0.1
195													
200													
205													
SUP		0.3	0.2										0.5

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900 , BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180		0.1											0.1
185	0.2	0.1			0.1								0.4
190	0.1												0.1
195													
200													
205													
SUP	0.2	0.2			0.1								0.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 1200, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185		0.1											0.1
190													
195													
200													
205													
SUP		0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 1200 , BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185			0.1										0.1
190													
195													
200													
205													
SUP			0.1										0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 1200, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185			0.2		0.1								0.3
190													
195													
200													
205													
SUP			0.2		0.1								0.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 1200 , BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185			0.1	0.2									0.3
190													
195													
200													
205													
SUP			0.1	0.2									0.3

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 1200, BY OAT SUM													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180			0.1	0.2		0.1							0.4
185													
190													
195													
200													
205													
SUM			0.1	0.2		0.1							0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 1200, BY OAT SUM													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180				0.2	0.2								0.4
185													
190													
195													
200													
205													
SUM				0.2	0.2								0.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS, BY OAT 60													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180	0.1												0.1
185	0.2	0.3	0.2										0.7
190	0.2		0.1										0.3
195													
200													
205													
SUM	0.5	0.3	0.3										1.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS, BY OAT 60													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180			0.1										0.1
185	0.2	0.3	0.2										0.7
190	0.2		0.1										0.3
195													
200													
205													
SUM	0.4	0.3	0.4										1.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS, BY OAT 70													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180	1.0	0.4	0.1										1.5
185	0.9	1.4	0.7	0.3									3.3
190	0.9	0.2	0.1										1.2
195	0.2												0.2
200													
205													
SUM	2.9	2.0	0.9	0.3									6.1

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS , BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	1.0	0.4	0.0											1.5
185	1.4	1.6	0.2	0.1										3.3
190	1.0	0.2												1.2
195	0.1	0.1												0.2
200														
205														
SUP	3.5	2.3	0.3	0.1										6.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.0	1.3	0.5	0.1										2.0
185	1.4	0.6	0.2	0.2										2.4
190	0.4	0.2												0.6
195														
200														
205														
SUP	1.9	2.1	0.7	0.3										5.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS , BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.4	0.7	0.5	0.4										2.0
185	1.2	1.2												2.4
190	0.4	0.2												0.6
195														
200														
205														
SUP	2.0	2.2	0.5	0.4										5.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS, BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.3	0.3												0.5
185	0.4	0.2		0.1										0.7
190														
195														
200														
205														
SUP	0.5	0.5		0.1										1.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS , BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180		0.5												0.5
185	0.6			0.1										0.7
190														
195														
200														
205														
SUP	0.5	0.5		0.1										1.2

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	1.4	2.0	0.6	0.1										4.1
185	2.8	2.5	1.1	0.6										7.0
190	1.5	0.4	0.2											2.1
195	0.2													0.2
200														
205														
SUM	5.9	4.9	1.9	0.7										13.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	1.4	1.7	0.6	0.4										4.1
185	3.3	3.1	0.4	0.2										7.0
190	1.6	0.4	0.1											2.1
195	0.1	0.1												0.2
200														
205														
SUM	6.4	5.3	1.1	0.6										13.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 60														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS	0.8													0.8
180	0.4	0.2	0.5	0.5	0.1									1.6
185	0.2	0.9	0.9	0.4		0.1								2.5
190			0.4											0.4
195														
200														
205														
SUM	1.4	1.1	1.8	0.9	0.1	0.1								5.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.8													0.8
180	0.1	0.4	0.3	0.1	0.1									1.6
185	0.8	1.1	0.5	0.1		0.1								2.5
190	0.4	0.1												0.4
195														
200														
205														
SUM	2.1	1.5	1.5	0.2	0.1	0.1								5.4

MINUTES FOR TORQUE, VS RPM BY MISSION SEG DESCNT, HY RATE OF CLIMB -2100, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.3	0.1		0.1									0.5
180	0.9	1.9	1.1	0.4										4.3
185	5.6	4.4	2.2	0.5	0.2									12.9
190	1.1	1.3	0.4											2.8
195														
200														
205														
SUM	7.6	7.4	3.8	0.9	0.2									20.5

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100 , BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	1.5	1.9	0.8	0.1										0.5
185	7.8	3.4	1.0	0.5	0.2									4.3
190	1.9	0.7	0.1	0.1										12.9
195														2.8
200														
205														
SUM	11.2	6.3	2.0	0.8	0.2									20.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	1.1	1.8	1.5	0.4	0.2									5.0
185	2.2	1.3	2.1	0.4	0.2									6.2
190		0.1	0.0											0.1
195														
200														
205														
SUM	3.3	3.2	3.6	0.8	0.4									11.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100 , BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	1.8	0.9	1.2	1.0										5.0
185	2.4	2.5	1.1	0.1	0.1									6.2
190	0.1	0.0												0.1
195														
200														
205														
SUM	4.3	3.5	2.3	1.1	0.1									11.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.4	0.3		0.1										0.7
185	0.5	0.3	0.2											1.0
190	0.2	0.1												0.3
195														
200														
205														
SUM	1.1	0.7	0.2	0.1										2.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100 , BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.1	0.4	0.2	0.1										0.7
185	0.5	0.5												1.0
190	0.3													0.3
195														
200														
205														
SUM	0.9	0.9	0.2	0.1										2.0

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.8	0.3	0.1	0.1									1.3
180	2.8	4.1	3.1	1.4	0.3								11.7
185	8.4	6.9	5.4	1.3	0.4	0.1							22.5
190	1.3	1.5	0.9										3.7
195													
200													
205													
SUM	13.3	12.8	9.5	2.7	0.8	0.1							39.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.8	0.3	0.1	0.1									1.3
180	3.6	3.6	3.1	1.3	0.1								11.7
185	11.4	7.4	2.6	0.7	0.2	0.1							22.5
190	2.6	0.8	0.1	0.1									3.7
195													
200													
205													
SUM	18.4	12.1	6.0	2.2	0.4	0.1							39.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180	0.5	0.1	0.2										0.8
185				0.1									0.1
190													
195													
200													
205													
SUM	0.5	0.1	0.2	0.1									0.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180			0.4	0.4									0.8
185	0.1												0.1
190													
195													
200													
205													
SUM	0.1		0.4	0.4									0.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3												0.3
180	3.6	1.4	1.6	0.2			0.1						6.9
185	1.1	1.0	0.3	0.1									2.5
190			0.4	0.1									0.5
195													
200													
205													
SUM	5.0	2.4	2.3	0.4			0.1						10.2

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3													0.3
180	2.1	1.4	3.0	0.3	0.1									6.9
185	0.7	1.0	0.7	0.1										2.5
190	0.2	0.1	0.2											0.5
195														
200														
205														
SUM	3.3	2.6	3.9	0.4	0.1									10.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.4											0.4
180	2.4	2.5	2.5	0.4			0.1							7.9
185	5.5	6.5	3.9	3.1	0.1									19.1
190	1.1	1.1	0.8		0.4									3.4
195	0.1													0.1
200														
205														
SUM	9.0	10.1	7.6	3.5	0.5		0.1							30.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.4												0.4
180	2.7	3.6	0.5	0.9	0.1	0.1								7.9
185	9.1	6.2	2.1	1.6	0.2									19.1
190	1.3	0.9	1.0	0.2										3.4
195			0.1											0.1
200														
205														
SUM	13.1	11.1	3.6	2.7	0.3	0.1								30.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	1.7	0.6	1.2	0.5	0.7	0.2								4.3
185	3.7	2.6	3.5	2.5	0.7	0.1								13.2
190	0.3	0.9	0.3	0.5										2.0
195														
200														
205														
SUM	5.7	4.1	5.0	3.6	0.8	0.3								19.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	1.7	1.0	0.7	0.8	0.1									4.3
185	4.9	5.5	2.7	0.1										13.2
190	1.0	0.8	0.1	0.1										2.0
195														
200														
205														
SUM	7.5	7.3	3.5	1.1	0.1									19.5



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY DAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	4.2	1.5	1.1	0.3	0.1			0.1						5.2
185	0.3	0.4	1.1	0.2				0.1						2.1
190														
195														
200														
205														
SUP	4.4	1.9	2.2	0.5	0.1			0.2						7.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800 , BY DAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	4.2	1.3	0.8	0.7				0.1						5.2
185	1.3	0.6	0.1				0.1							2.1
190														
195														
200														
205														
SUP	3.5	1.9	0.9	0.7			0.1	0.1						7.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY DAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3		0.4											0.7
180	10.4	6.1	6.5	1.4	0.1	0.2	0.1	0.2						25.1
185	10.6	10.5	6.9	6.1	0.8	0.1		0.1						37.1
190	1.4	2.0	1.5	0.6	0.4									5.9
195	0.1													0.1
200														
205														
SUP	22.8	18.6	17.3	8.1	1.4	0.3	0.1	0.3						68.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800 , BY DAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3	0.4												0.7
180	8.7	7.4	5.4	3.1	0.3	0.1		0.1						25.1
185	16.1	13.3	5.5	1.8	0.2		0.1							37.1
190	2.5	1.8	1.3	0.3										5.9
195			0.1											0.1
200														
205														
SUP	27.6	22.9	12.3	5.3	0.5	0.1	0.1	0.1						68.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY DAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.3												0.3
180	0.1	0.6	1.6											2.4
185			0.2	0.2										0.4
190														
195														
200														
205														
SUM	0.1	0.9	1.8	0.2										3.0

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500 , BY OAT														50
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.3										0.3
180			1.8	0.5										2.4
185		0.2	0.2											0.4
190														
195														
200														
205														
SUM		0.2	2.0	0.8										3.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	4.0													1.0
180	8.6	1.4	1.7	0.9	0.7		0.1							11.3
185	2.1	3.4	1.9	3.3	1.1									11.8
190	0.8	0.5	2.3	0.2										3.8
195														
200														
205														
SUM	10.5	5.3	5.8	4.4	1.9		0.1							27.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500 , BY OAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.8		0.2											1.0
180	1.4	3.2	4.7	1.4	0.5			0.1						11.3
185	3.4	2.3	3.3	1.3	1.2	0.3								11.8
190	0.4	0.1	2.7	1.6										3.8
195														
200														
205														
SUM	6.0	5.6	1.9	4.4	1.7	0.3		0.1						27.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT														70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.4			0.1		0.2	0.0							1.8
180	3.7	5.6	7.4	4.2	0.2	0.2	0.2	0.1						21.8
185	6.8	14.4	17.9	8.9	3.4	0.2	0.2							51.8
190	1.7	2.6	3.8	2.3										10.4
195	0.1	0.1	0.0	0.4										0.6
200														
205														
SUM	13.9	22.7	29.2	15.9	3.6	0.6	0.4	0.1						86.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500 , BY OAT														70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.7	0.9	0.1				0.0							1.9
180	6.8	7.3	5.6	1.3	0.4	0.2	0.1							21.8
185	19.8	18.5	7.5	5.0	0.2	0.2								51.8
190	4.2	2.8	2.1	1.0	0.2									10.4
195	0.6													0.6
200														
205														
SUM	32.2	29.4	15.4	7.4	1.4	0.4	0.2							86.4

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT														80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.0		0.1	0.3										0.4
180	2.0	3.2	3.2	4.6	2.6			0.2						15.8
185	6.8	12.9	7.2	6.9	3.2	0.4	0.2	0.1						39.7
190	0.7	2.5	2.3	0.9	0.1		0.0							6.6
195		0.1						0.1						0.2
200														
205														
SUM	9.5	18.8	14.8	12.6	5.7	0.4	0.3	0.4						62.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT														80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.4												0.4
180	7.8	4.5	4.4	0.5	0.5			0.1						15.8
185	12.3	15.4	6.6	3.0	1.5	0.4	0.4	0.1						39.7
190	2.8	2.0	0.6	1.2		0.0								6.6
195	0.1							0.1						0.2
200														
205														
SUM	23.0	22.4	9.5	4.7	2.7	0.4	0.4	0.3						62.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT														90
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1									0.1
180	2.0	2.2	0.8	1.7	0.2	0.1	0.1							7.1
185	1.4	2.1	2.2	0.6	0.2	0.1	0.1	0.1						6.8
190	0.2	0.0	0.0	0.2										0.5
195														
200														
205														
SUM	3.6	4.3	3.0	2.5	0.6	0.2	0.2	0.1						14.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT														90
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180	2.6	2.4	1.1	0.9			0.1							7.1
185	2.8	1.5	0.7	1.3	0.2	0.2	0.1							6.8
190	0.4	0.0												0.5
195														
200														
205														
SUM	5.9	3.9	1.8	2.2	0.2	0.2	0.2							14.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	2.5	0.3	0.1	0.4	0.1	0.2	0.0							3.6
180	14.6	13.0	14.8	11.3	3.8	0.3	0.4	0.3						58.4
185	17.1	32.8	31.4	19.8	7.9	0.7	0.5	0.2						110.4
190	3.4	5.7	8.4	3.6	0.1		0.0							21.2
195	0.1	0.2	0.0	0.4				0.1						0.8
200														
205														
SUM	37.6	52.0	54.7	35.6	11.9	1.2	1.0	0.6						194.5

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500 , BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180	1.6	1.3	0.3			0.0								3.6
185	18.6	17.4	15.6	4.7	1.4	0.2	0.2							58.4
190	38.3	37.8	19.3	10.7	3.7	1.1	0.5	0.1						110.4
195	7.8	4.9	4.4	3.8	0.2	0.0								21.2
200	0.7						0.1							0.8
205														
SUM	67.1	61.5	38.6	19.5	5.3	1.3	0.8	0.4						194.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														50
LESS	10	20	30	40	50	60	70	80	90	100	110	120		SUM
180	0.4	1.2	3.1	1.3	0.1									6.1
185	0.6	2.0	0.4	0.4										3.4
190			3.7											0.7
195														
200														
205														
SUM	1.0	3.2	4.2	1.7	0.1									10.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 , BY OAT														50
LESS	10	20	30	40	50	60	70	80	90	100	110	120		SUM
180		0.1	2.3	3.6	0.1									6.1
185	0.4	1.2	1.8											3.4
190		0.3	0.3											0.7
195														
200														
205														
SUM	0.4	1.7	4.4	3.6	0.1									10.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														60
LESS	10	20	30	40	50	60	70	80	90	100	110	120		SUM
180	9.0	6.8	8.0	3.3	0.5	0.2	0.1							27.9
185	3.6	7.3	8.7	9.1	2.9	0.2								31.8
190	1.3	4.7	4.5	2.3	1.1									13.9
195														
200														
205														
SUM	13.9	18.8	21.1	14.7	4.5	0.4	0.1							73.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 , BY OAT														60
LESS	10	20	30	40	50	60	70	80	90	100	110	120		SUM
180	5.5	5.4	10.9	4.7	1.3	0.1								27.9
185	5.3	7.3	9.6	7.9	1.9									31.8
190	0.7	1.0	5.2	4.9	1.1									13.9
195														
200														
205														
SUM	11.2	13.7	26.7	17.5	4.3	0.1								73.6

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1	0.4	0.7	0.1	0.3									1.1
180	9.9	7.2	8.3	10.8	4.2	0.6	0.1			0.1				41.1
185	9.0	16.0	21.5	26.2	9.8	1.3	0.0	0.0		0.1				84.0
190	2.0	3.7	7.4	8.4	3.4	0.1								25.0
195	0.2		0.2	0.2										0.5
200														
205														
SUM	21.1	27.3	37.7	45.7	17.7	2.0	0.1	0.0		0.1				151.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 , BY OAT													70	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3	0.4	0.2	0.2										1.1
180	12.5	10.8	8.6	4.9	4.1	0.1		0.1						41.1
185	14.0	24.4	19.2	18.3	6.6	1.5	0.0	0.1						84.0
190	4.4	2.1	7.4	6.9	4.1	0.1								25.0
195	0.4	0.2												0.5
200														
205														
SUM	31.6	37.9	35.4	30.3	14.8	1.7	0.0	0.1						151.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT													80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.0	0.1	1.0									1.2
180	2.5	2.1	7.1	10.0	7.0	0.3								29.0
185	6.1	9.7	16.7	12.6	7.5	0.9	0.3	0.3		0.1				54.2
190	1.1	2.3	3.1	1.0	0.9									8.4
195				0.0										0.0
200														
205														
SUM	9.7	14.1	26.7	23.8	16.1	1.2	0.3	0.3		0.1				92.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 , BY OAT														80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.4	0.8											1.2
180	7.1	10.0	5.3	5.3	0.4	0.6								29.0
185	15.0	18.3	4.9	6.8	3.2	0.8	0.1	0.1						54.2
190	2.2	2.2	1.6	2.2	0.7									8.4
195		0.0												0.0
200														
205														
SUM	24.4	30.9	17.5	14.3	4.1	1.4	0.1	0.1						92.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														90
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	1.3	4.0	0.9	2.6	0.3	0.1		0.2						9.4
185	1.0	4.3	3.8	3.0	1.0	0.3			0.1					13.6
190	0.1		0.4	0.2		0.1			0.2					1.1
195		0.1	0.1											0.2
200														
205														
SUM	2.5	8.4	5.3	5.8	1.3	0.5		0.2	0.3					24.3

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	1.8	2.1	3.9	1.4			0.1		0.1					9.4
185	3.2	4.2	3.5	2.2	0.4			0.1						13.6
190	0.1	0.7		0.1			0.2							1.1
195		0.1		0.1										0.2
200														
205														
SUM	5.1	7.1	7.4	3.8	0.4		0.3	0.1	0.1					24.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1	0.4	0.3	0.2	1.3									2.3
180	23.1	21.3	27.4	27.9	12.2	1.2	0.2	0.2		0.1				113.5
185	20.4	39.3	51.1	51.3	21.2	2.7	0.3	0.3	0.1	0.1				186.9
190	4.5	10.8	16.1	11.9	5.4	0.2			0.2					49.1
195	0.2	0.1	0.3	0.2										0.8
200														
205														
SUM	48.2	71.9	95.2	91.7	40.0	4.1	0.5	0.5	0.3	0.2				352.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 , BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3	0.8	1.7	0.2										2.3
180	27.0	28.4	30.9	19.9	6.3	0.8	0.1	0.1	0.1					113.5
185	37.6	55.3	44.0	35.2	12.1	2.3	0.1	0.2						186.9
190	7.4	6.4	15.5	14.1	5.4	0.1	0.2							49.1
195	0.4	0.3		0.1										0.8
200														
205														
SUM	72.7	91.3	91.4	69.5	23.9	3.2	0.4	0.3	0.1					352.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.9											0.9
180	1.6	1.6	2.2	0.8	1.7									7.9
185		4.3	3.8	0.4										8.5
190			1.1	0.8										1.9
195														
200														
205														
SUM	1.6	6.0	7.9	2.0	1.7									19.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.9										0.9
180		1.3	2.4	3.2	1.1									7.9
185		0.4	7.8		0.4									8.5
190		0.8	0.7	0.4										1.9
195														
200														
205														
SUM		2.4	10.8	4.5	1.4									19.2

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900, BY OAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.8			0.1	0.5									1.5
180	14.9	5.3	9.4	7.7	2.4	0.1		0.1	0.1					40.0
185	5.7	9.8	13.5	13.0	6.2	1.7								49.9
190	4.1	4.8	5.7	6.5	0.7	0.7								22.5
195			0.1											0.1
200														
205														
SUM	25.5	19.9	28.8	27.3	9.8	2.4		0.1	0.1					113.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900 , BY OAT													60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3		0.6	0.5										1.5
180	8.0	7.0	15.0	8.2	1.6			0.2						40.0
185	2.3	11.3	21.6	10.5	3.1	0.9								49.9
190	0.2	3.0	6.6	9.4	3.2									22.5
195				0.1										0.1
200														
205														
SUM	10.8	21.2	43.8	28.8	8.2	0.9		0.2						113.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.4		0.5		0.1									1.1
180	13.0	10.5	13.7	15.8	9.9	1.2	0.1							61.2
185	9.2	20.5	34.1	46.3	19.1	3.3	0.6	0.2	0.0					133.3
190	3.1	4.7	4.7	15.9	6.0	0.3	0.2	0.2						35.2
195				0.1										0.1
200														
205														
SUM	25.7	35.8	50.0	78.1	35.0	4.8	1.0	0.4	0.0					230.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													-900 ,	BY	OAT	70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS	0.7	0.4												1.1		
180	16.2	18.0	12.6	8.4	4.1	2.0	0.0							61.2		
185	15.2	25.3	37.1	37.5	15.9	1.4	0.7	0.1						133.3		
190	3.3	2.5	4.8	15.8	8.0	0.5	0.1	0.2						35.2		
195	0.1													0.1		
200																
205																
SUP	35.5	46.1	54.5	61.7	27.9	3.8	0.8	0.4						230.8		

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-900,	BY	OAT	80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.3	0.2									0.5
180	2.5	3.3	9.1	15.1	6.6	0.4	0.3	0.1	0.1					37.5
185	10.1	15.9	17.6	23.1	18.4	2.1	1.1	1.0						89.4
190	1.8	2.9	4.0	6.3	2.5	0.0	0.1	0.2						18.0
195		0.2					0.0							0.2
200														
205														
SUM	14.5	22.3	30.7	44.9	27.7	2.6	1.6	1.4	0.1					145.7

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-900 ,	BY OAT		80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.3	0.2										0.5
180	7.8	11.0	9.0	6.7	2.5	0.1	0.2	0.3						37.5
185	17.0	21.5	22.1	21.5	4.6	1.3	0.9	0.5						89.4
190	4.0	4.4	4.7	4.4	0.6	0.3	0.2	0.2						18.0
195	0.2						0.0							0.2
200														
205														
SUM	29.0	36.9	35.4	32.8	7.7	1.6	1.3	1.0						145.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-900 ,	BY OAT		90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2										0.2
180	2.0	4.6	1.7	3.2	2.6	0.2	0.1	0.6	0.1					15.0
185	0.9	3.1	7.6	13.1	3.3	1.9	0.5		0.2					30.6
190	0.2		0.7	1.8	0.1		0.1							2.9
195														
200														
205														
SUM	3.1	7.7	10.0	18.3	5.9	2.1	0.7	0.6	0.3					48.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-900 ,	BY OAT		90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.2												0.2
180	3.7	4.9	4.8	0.6	0.3	0.5	0.1	0.1						15.0
185	5.6	6.6	7.7	8.7	0.9	0.5	0.5		0.1					30.6
190	0.2	0.4	0.6	1.3	0.3	0.1								2.9
195														
200														
205														
SUM	9.6	12.0	13.1	10.6	1.5	1.1	0.6	0.1	0.1					48.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-900 ,	BY OAT		SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.3		1.4	0.6	0.9									4.2
180	34.0	25.4	33.0	42.6	23.1	1.9	0.6	0.8	0.3					161.7
185	25.9	53.7	76.6	95.9	46.9	9.0	2.2	1.2	0.2					311.6
190	9.2	12.5	16.3	31.4	9.2	1.0	0.4	0.5						80.4
195		0.2	0.1	0.1			0.0							0.4
200														
205														
SUM	70.3	91.7	127.4	170.5	80.2	11.9	3.2	2.5	0.5					558.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-900 ,	BY OAT		SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.0	0.6	0.9	1.7										4.2
180	35.7	42.1	43.7	27.1	9.4	2.5	0.3	0.6						161.7
185	40.2	65.0	96.3	78.2	24.9	4.1	2.1	0.6	0.1					311.6
190	7.7	11.0	16.7	31.4	12.2	0.8	0.2	0.4						80.4
195	0.3			0.1			0.0							0.4
200														
205														
SUM	84.8	118.7	157.6	138.4	46.7	7.4	2.8	1.7	0.1					558.3



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				2.1										2.1
185														
190														
195														
200														
205														
SUM				2.1										2.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT 40													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS			1.3	0.8									2.1
180													
185													
190													
195													
200													
205													
SUM			1.3	0.8									2.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.5	0.5									1.1
180		1.3	4.9	7.7	2.1									16.0
185		1.0	4.4											5.4
190			0.5	1.0										1.5
195														
200														
205														
SUM		2.3	9.8	9.3	2.6									24.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.5	0.5									1.1
180		1.4	2.8	7.3	4.2	0.2								16.0
185			5.1	0.3										5.4
190			1.5											1.5
195														
200														
205														
SUM		1.4	9.5	8.2	4.7	0.2								24.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.0			0.1										1.1
180	9.1	6.3	14.0	11.2	10.2	1.0		0.1	0.1					51.9
185	5.1	14.1	21.4	27.4	7.7	2.9	0.4	0.1						79.1
190	1.1	2.9	7.6	4.4	1.1	0.3								19.3
195														
200														
205														
SUP	16.2	23.3	44.9	43.0	18.9	4.2	0.4	0.2	0.1					151.3

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT													60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			1.0	0.1										1.1
180	5.5	6.6	16.7	13.1	6.3	2.8	0.8	0.1						51.9
185	3.8	8.5	32.3	23.1	10.7	0.6		0.1						79.1
190	0.1	0.3	8.1	9.6	0.9	0.3								19.3
195														
200														
205														
SUM	9.4	15.4	58.1	45.9	17.9	3.6	0.8	0.2						151.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.6	0.7		1.4	0.4									4.1
180	13.6	8.0	12.0	20.2	11.9	4.8	0.5	0.2						71.2
185	5.7	15.1	35.6	67.4	38.3	6.2	2.2	0.7						171.1
190	4.2	5.9	7.5	31.7	22.4	5.1	0.7							77.6
195			0.4	0.2	0.2									0.8
200														
205														
SUM	25.1	29.7	55.5	120.9	73.3	16.1	3.4	0.9						324.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT														70
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.6	2.2	0.2	0.1	0.7									4.1
180	15.9	17.1	13.2	13.7	7.4	3.6	0.4							71.2
185	11.2	31.3	43.0	49.5	37.4	5.7	0.6	0.3						171.1
190	2.9	4.2	15.0	30.7	21.2	3.6								77.6
195		0.1	0.6	0.1										0.8
200														
205														
SUM	31.4	54.9	69.0	94.1	61.1	12.8	1.0	0.3						324.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT													80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.2		0.1	0.6	0.2								1.1
180	2.2	2.6	7.7	22.6	20.7	4.0	0.8	0.3	0.0					60.5
185	10.5	16.8	23.3	38.9	32.7	4.9	2.1	1.5	0.4					130.6
190	2.2	7.1	4.6	12.7	7.3	1.6	0.6	0.4	0.1					36.6
195				0.1										0.1
200														
205														
SUM	15.1	26.6	35.6	74.4	60.2	10.7	3.4	2.2	0.5					228.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT													80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.3		0.2	0.4	0.2								1.1
180	9.4	12.5	10.8	13.8	9.7	3.7	0.5	0.1						60.5
185	18.0	22.2	32.6	31.0	20.7	3.9	1.4	0.7	0.2					130.6
190	3.7	4.7	6.5	16.5	4.1	0.5	0.4		0.2					36.6
195				0.1										0.1
200														
205														
SUM	31.1	39.6	49.8	61.6	34.8	8.3	2.3	0.8	0.4					228.8

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.3									0.3
180	1.4	4.0	4.0	9.4	8.7	2.3	0.5	0.6					30.5
185	2.7	6.1	10.7	14.9	15.5	5.6	1.6	0.5	0.3				58.3
190		0.2	1.5	2.5	2.7	0.3	0.2	0.1					6.9
195				0.1									0.1
200													
205													
SUM	4.2	10.3	16.2	27.0	26.7	8.2	2.3	1.3	0.3				96.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS		0.2	0.1										0.3
180	7.2	6.2	7.7	6.1	2.7	0.7	0.4	0.1					30.5
185	6.8	11.7	14.8	15.8	5.7	1.9	1.1	0.4	0.3				58.3
190	1.6	0.4	0.2	2.1	1.7	0.7	0.1						6.9
195				0.1									0.1
200													
205													
SUM	15.6	18.5	22.8	24.2	9.4	3.4	1.6	0.5	0.0				96.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	2.6	0.9		2.1	1.5	0.2							7.7
180	26.3	22.2	42.6	73.2	52.5	12.2	1.8	1.2	0.1				232.2
185	24.1	53.1	95.3	148.5	94.0	19.6	6.2	2.9	0.7				444.4
190	7.5	16.1	23.8	52.3	32.9	7.3	1.5	0.5	0.1				141.8
195			0.4	0.4	0.2								1.0
200													
205													
SUM	60.5	92.3	162.1	276.6	181.3	39.3	9.6	4.6	0.9				827.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	1.4	2.7	1.3	0.9	1.2	0.2							7.7
180	38.1	43.8	51.2	55.3	30.5	11.0	2.0	0.3					232.2
185	39.8	73.8	124.7	119.8	69.4	12.0	3.1	1.6	0.2				444.4
190	8.3	9.6	31.4	58.9	27.9	5.1	0.5		0.2				141.8
195		0.1	0.6	0.3									1.0
200													
205													
SUM	87.5	129.9	209.2	235.2	129.0	28.3	5.7	1.9	0.4				827.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT 40													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.6	1.4								2.4
180													
185													
190													
195													
200													
205													
SUM				0.6	1.4								2.4

TABLE VIII - Continued

MINUTES FOR TORQUE <sub>2</sub> VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				1.9	0.5									2.4
185														
190														
195														
200														
205														
SUM				1.9	0.5									2.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG DESC'NT, BY RATE OF CLIMB														-300,	BY	OAT	50
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS				0.2										0.2			
180		0.5	3.2	8.6	8.5									20.8			
185		0.3	4.4	4.1										5.8			
190		0.1	3.3	3.8										7.2			
195																	
200																	
205																	
SUM		0.9	7.9	16.7	8.5									34.0			

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT														50
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2										0.2
180		0.1		9.7	8.5	1.5								20.8
185			3.9	1.0	1.0									5.8
190			6.9	0.3										7.2
195														
200														
205														
SUM		0.1	11.8	11.2	9.4	1.5								34.0

MINUTES FOR TORQUE <sub>1</sub> VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.6	2.1	0.1										0.8
180	6.5	10.7	12.5	16.1	14.9	3.0	0.4							64.1
185	1.8	9.7	21.7	25.6	15.0	5.8	4.8	0.1						84.5
190	1.2	1.3	5.5	28.7	7.6	2.6	0.1							46.9
195														
200														
205														
SUM	9.6	22.2	39.8	70.5	37.4	11.4	5.3	0.1						196.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT													60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.2	0.5	0.1									0.8
180	4.1	12.5	13.8	14.8	10.7	3.1	0.1							64.1
185	1.4	6.7	30.9	22.9	18.7	3.6	0.3							84.5
190	0.2	0.6	5.0	19.3	20.4	0.9	0.0							46.9
195														
200														
205														
SUM	5.7	19.8	54.9	57.5	50.1	7.6	0.5							196.3

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.7	0.6		1.4									2.7
180	12.8	4.9	13.5	16.3	18.1	5.9	0.8	0.3	0.2				74.9
185	12.4	13.4	31.1	76.7	85.8	23.5	5.4	0.8					248.9
190	2.0	0.7	7.3	19.4	21.7	21.2	6.4	0.9					78.8
195	0.1		0.1	0.5	0.4								1.1
200													
205													
SUM	28.0	19.6	53.9	112.9	126.4	50.6	12.5	2.0	0.2				406.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.3	0.4	0.4	1.2									2.7
180	12.0	14.9	11.9	13.7	17.6	3.6	1.1	0.1					74.9
185	6.1	16.8	55.7	76.5	66.8	25.9	1.1	0.0					248.9
190	0.5	2.3	10.6	23.4	27.9	13.2	0.5						78.8
195		0.1	0.4	0.2	0.4								1.1
200													
205													
SUM	19.1	34.4	78.9	114.1	114.0	42.7	3.1	0.2					406.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS			0.2	0.3	0.5								1.0
180	2.5	4.6	5.5	21.8	22.1	3.2	1.2	0.4					61.2
185	10.2	15.4	29.9	56.2	45.3	14.5	6.2	3.2	0.4	0.1			181.5
190	2.0	2.1	4.5	12.9	12.5	5.9	2.3	1.6					43.8
195			0.2	0.1	0.1								0.4
200													
205													
SUM	14.6	22.1	40.1	91.2	80.3	24.1	9.8	5.3	0.4	0.1			287.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS		0.2	0.2	0.1		0.5							1.0
180	4.5	7.4	11.2	18.7	14.3	3.9	0.7						61.2
185	15.6	24.6	34.0	44.6	43.9	14.6	3.6	0.6					181.5
190	3.1	2.8	5.5	15.0	10.7	2.9	3.8						43.8
195	0.1		0.1	0.1	0.1								0.4
200													
205													
SUM	23.4	34.3	51.1	78.5	69.5	21.5	8.6	0.6					287.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.3												0.3
180	1.1	3.7	3.6	6.6	8.7	4.3	1.4	0.2	0.1				29.8
185	2.9	8.2	11.1	22.9	21.4	16.2	5.1	0.9	0.6				89.3
190	0.3	1.4	3.1	1.4	4.1	0.3	0.5						11.2
195		0.0	0.4		0.1								0.5
200													
205													
SUM	4.3	13.7	15.2	30.9	34.3	20.9	7.1	1.1	0.7				131.1

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.3											0.3
180	4.2	7.2	7.9	6.1	2.6	1.4	0.3	0.1						29.8
185	7.7	9.8	17.2	31.0	16.0	4.3	1.8	1.3	0.2					89.3
190	1.4	1.2	3.7	2.8	0.9	0.6	0.5							11.2
195	0.1			0.4										0.5
200														
205														
SUM	13.5	18.2	29.1	40.3	19.5	6.3	2.6	1.4	0.2					131.1

MINUTES FOR TORQUE <sub>2</sub> VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.7	1.4	0.1	0.5	1.8	0.5								5.0
180	23.0	24.3	40.2	70.1	74.2	16.4	3.8	1.0	0.3					253.3
185	27.3	46.4	95.3	185.5	167.5	60.0	21.5	5.0	1.0	0.1				610.1
190	5.4	5.7	23.6	66.2	45.1	30.0	9.3	2.5						187.9
195	0.1	0.0	0.7	0.6	0.6									2.1
200														
205														
SUM	56.5	78.4	159.9	322.9	289.7	106.9	34.6	8.5	1.3	0.1				1058.3

MINUTES FOR TORQUE <sub>2</sub> VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.5	0.3	1.1	1.2	1.6		0.5							5.0
180	24.8	42.1	50.8	64.4	54.5	13.5	2.2	0.2						253.3
185	30.9	57.4	14.6	175.9	146.3	48.4	6.9	1.9	0.2					610.1
190	5.3	6.9	31.7	60.8	60.3	17.6	5.3							187.9
195	0.2	0.1	0.5	0.7	0.4	0.1								2.1
200														
205														
SUM	61.7	107.3	225.7	303.5	263.7	79.6	14.9	2.1	0.2					1058.3

MINUTES FOR TORQUE, VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			J.1		0.1									0.2
185		0.1												0.1
190			J.1	0.1										0.2
195														
200														
205														
SUM		0.1	J.2	0.1	0.1									0.5

MINUTES FOR TORQUE <sub>2</sub> VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1	0.1									0.2
185				0.1										0.1
190				0.1	0.1									0.2
195														
200														
205														
SUM				0.3	0.2									0.5

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.4	0.1	0.1	0.2	0.3	0.1								1.2
185	0.1	0.7	0.8	0.9	0.3	0.4	0.2							3.4
190		0.1	0.6	0.5	0.3									1.5
195														
200														
205														
SUM	0.5	0.9	1.5	1.6	0.9	0.5	0.2							6.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.2	0.1	0.5	0.2	0.1	0.1								1.2
185		0.5	1.1	0.8	0.3	0.6	0.2							3.4
190	0.1		0.2	0.9	0.4									1.5
195														
200														
205														
SUM	0.3	0.6	1.8	1.8	0.7	0.7	0.2							6.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.2	0.2	0.1	0.5	1.4	0.3	0.0						2.7
185	0.1	0.3	1.4	3.3	1.6	0.6	0.3						7.7
190	0.1	0.3	0.3	1.1	0.9	0.2	0.4	0.1					3.9
195					0.1								0.1
200													
205													
SUM	0.4	0.8	2.3	5.0	4.0	1.1	0.7	0.1					14.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.5	0.4	0.2	0.6	0.6	0.4								2.7
185	0.2	0.8	2.1	2.4	1.3	0.6	0.3							7.7
190		0.1	1.0	1.0	1.4	0.3	0.1							3.9
195					0.1									0.1
200														
205														
SUM	0.7	1.3	3.3	4.0	3.4	1.3	0.4							14.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 80														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180		0.2	0.3	0.7	1.4	0.1								2.7
185	0.2	0.4	1.3	3.1	2.3	0.5	0.5	0.4	0.1					8.8
190	0.3	0.1	0.6	0.6	0.4	0.6	0.3							2.9
195							0.1							0.1
200														
205														
SUP	0.5	0.7	1.2	4.4	4.7	1.2	0.8	0.5	0.1					14.5

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														300 , BY OAT 90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
180	0.2	0.5	0.7	0.9	0.3	0.1								2.7	
185	1.0	0.7	1.0	2.2	2.0	1.1	0.5	0.2						8.8	
190	0.2	0.1	0.4	0.8	0.7	0.5	0.2							2.9	
195								0.1						0.1	
200															
205															
SUM	1.4	1.3	2.1	3.9	3.0	1.7	0.7	0.3						14.5	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														300 , BY OAT 90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
180			0.2	0.3	1.0	0.2								1.8	
185			0.8	1.5	1.2	1.0	0.4	0.0						4.9	
190	0.1		0.2	0.1	0.6		0.1							1.1	
195															
200															
205															
SUM	0.1		1.2	1.8	2.8	1.3	0.5	0.0						7.8	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														300 , BY OAT 90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
180	0.5	0.1	0.4	0.0	0.3	0.5								1.8	
185	0.7		0.3	1.1	1.2	0.9	0.3							4.9	
190		0.2	0.3	0.3	0.1	0.1	0.1							1.1	
195															
200															
205															
SUM	1.2	0.7	1.0	1.4	1.5	1.4	0.4							7.8	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														300 , BY OAT SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
180	0.6	0.5	0.8	1.7	4.2	0.7	0.0							8.6	
185	0.4	1.5	4.3	8.8	5.4	2.6	1.4	0.4	0.1					24.9	
190	0.5	0.5	2.3	2.4	2.2	0.8	0.8	0.1						9.5	
195					0.1			0.1						0.2	
200															
205															
SUM	1.5	2.5	7.4	12.9	11.7	4.1	2.2	0.6	0.1					43.2	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														300 , BY OAT SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
180	1.3	1.1	1.7	1.9	1.3	1.1								8.6	
185	1.7	2.4	4.4	6.6	4.3	3.2	1.3	0.2						24.9	
190	0.3	0.4	2.0	2.7	2.4	0.9	0.4							9.5	
195					0.1			0.1						0.2	
200															
205															
SUM	3.6	3.9	9.3	11.4	8.9	5.2	1.7	0.3						43.2	



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185			0.1											0.1
190														
195														
200														
205														
SUM			0.1	0.1										0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.1										0.1
180														0.1
185			0.1											
190														
195														
200														
205														
SUM			0.1	0.1										0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 60														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS														
180			0.1	0.2	0.1									0.3
185			0.2											0.2
190														
195														
200														
205														
SUM			0.3	0.2	0.0									0.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.1	0.3	0.2										0.3
185			0.2											0.2
190														
195														
200														
205														
SUM		0.1	0.3	0.2										0.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.1	0.3	0.1	0.2	0.0	0.1	0.1						0.9
185	0.1		0.2	0.2	0.3									0.7
190				0.1		0.2	0.2							0.5
195														
200														
205														
SUM	0.1	0.1	0.5	0.4	0.5	0.2	0.3	0.1						2.1

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													600 ,	BY	OAT	70	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180		0.2	0.3	0.2	0.1			0.1									0.9
185		0.2	0.3	0.1	0.2												0.7
190			0.1	0.1	0.2	0.1											0.5
195																	
200																	
205																	
SUM		0.4	0.7	0.4	0.4	0.1		0.1									2.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													600 ,	BY	OAT	80	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180						0.1	0.1										0.3
185		0.1	0.2	0.3		0.1	0.1										0.8
190		0.1		0.1			0.1										0.3
195				0.1		0.1											0.2
200																	
205																	
SUM		0.2	0.2	0.5		0.3	0.3										1.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													600 ,	BY	OAT	80	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180					0.1	0.0	0.1										0.3
185		0.3		0.2	0.1	0.1	0.1										0.8
190		0.1		0.1			0.1										0.3
195				0.1				0.1									0.2
200																	
205																	
SUM		0.4		0.4	0.2	0.1	0.3	0.1									1.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													600 ,	BY	OAT	90	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180	0.1			0.2	0.4												0.7
185				0.3	0.3												0.6
190							0.1	0.1									0.2
195																	
200																	
205																	
SUM	0.1			0.5	0.7		0.1	0.1									1.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													600 ,	BY	OAT	90	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
180				0.3		0.4											0.7
185	0.1			0.1	0.4												0.6
190						0.1	0.1										0.2
195																	
200																	
205																	
SUM	0.1			0.4	0.4	0.5	0.1										1.4

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180	0.1	0.1	0.4	0.6	0.6	0.2	0.2	0.1					2.3
185	0.1	0.1	0.7	0.8	0.6	0.1	0.1						2.4
190		0.1		0.2		0.2	0.4	0.1					1.0
195				0.1		0.1							0.2
200													
205													
SUM	0.2	0.3	1.1	1.6	1.2	0.6	0.7	0.2					5.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180		0.3	0.3	0.8	0.2	0.4	0.1	0.1					2.3
185	0.1	0.5	0.6	0.4	0.7	0.1	0.1						2.4
190		0.1	0.1	0.2	0.2	0.2	0.2						1.0
195				0.1			0.1						0.2
200													
205													
SUM	0.1	0.9	1.1	1.4	1.1	0.7	0.4	0.2					5.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT 50													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185				0.1									0.1
190													
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT 50													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185			0.1										0.1
190													
195													
200													
205													
SUM			0.1										0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180		0.1											0.1
185				0.4									0.4
190			0.9	0.2									1.1
195			0.1	0.2									0.3
200													
205													
SUM		0.1	1.0	0.6									1.9

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1									0.1
180				0.4										0.4
185			0.5	0.5	0.1									1.1
190				0.3										0.3
195														
200														
205														
SUM			0.5	1.2	0.2									1.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.3		0.2	0.1	0.6									1.3
185	0.2	0.3	0.3	0.6	0.9	0.2	0.1	0.2						2.7
190			0.2	0.2	0.3	0.5								1.3
195														
200														
205														
SUM	0.5	0.3	0.8	0.9	1.9	0.7	0.1	0.2						5.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.3			0.8	0.3									1.3
185	0.1		0.2	1.0	1.4									2.7
190			0.2	0.5	0.5									1.3
195														
200														
205														
SUM	0.4		0.4	2.3	2.2									5.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.2	0.2	0.5		0.1							1.0
185				0.3	0.1	0.1				0.1				0.6
190				0.7		0.1								0.8
195														
200														
205														
SUM			0.2	1.3	0.6	0.2	0.1			0.1				2.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.6	0.1	0.7		0.1							1.0
185				0.3	0.1	0.1			0.1					0.6
190			0.4											0.8
195														
200														
205														
SUM			1.4	0.5	0.3	0.1	0.1		0.1					2.5

TABLE VIII - Continued

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														0.1
180		0.1	0.1				0.2	0.1						1.1
185														
190														
195														
200														
205														
SUM		0.1	0.3	0.3	0.2		0.2	0.1						1.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185			0.1	0.4	0.2	0.2	0.2							1.1
190														
195														
200														
205														
SUM			0.1	0.5	0.2	0.2	0.2							1.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1											0.1
180	0.3		0.5	0.3	1.2		0.1							2.9
185	0.2	0.4	0.5	2.2	1.4	0.3	0.2	0.3		0.1				5.7
190			0.2	1.0	0.5	0.6								2.4
195														
200														
205														
SUM	0.5	0.4	1.4	3.6	3.5	0.9	0.4	0.3		0.1				11.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1									0.1
180	0.3		0.6	1.4	0.5		0.1							2.9
185	0.1		0.9	2.3	1.4	0.3	0.2		0.1					5.7
190			1.0	0.8	0.5									2.4
195														
200														
205														
SUP	0.4		2.5	4.5	2.9	0.3	0.3		0.1					11.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2										
180														0.2
185														
190														
195														
200														
205														
SUM				0.2										0.2

TABLE VIII - Continued

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.2									0.2
185														
190														
195														
200														
205														
SUM					0.2									0.2

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.5										0.5
180				0.7										0.7
185			0.2	0.4	0.1									0.9
190														
195														
200														
205														
SUM			0.2	1.7	0.2									2.1

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.5									0.5
180				0.7										0.7
185			0.4	0.5										0.9
190														
195														
200														
205														
SUM			0.4	1.2	0.5									2.1

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.4	0.5	5.3	2.2	0.9								9.4
185		0.3	1.8	10.9	3.2	1.2	0.4							17.7
190				0.9	0.7	0.3								2.0
195														
200														
205														
SUM		0.7	2.3	17.1	6.1	2.4	0.4							29.0

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			1.9	4.5	2.4	0.7								9.4
185		0.2	4.5	7.2	4.9	1.0								17.7
190			0.1	1.4	0.5									2.0
195														
200														
205														
SUM		0.2	6.4	13.1	7.7	1.7								29.0

TABLE VIII - Continued

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT 70													SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
					0.4									0.4
180	1.7		3.5	9.4	6.7	1.4	0.3		0.1					20.1
185		0.6	2.9	18.6	10.7	5.6	0.9	0.9						39.8
190			2.0	2.5	1.4	1.4	0.4	0.1						7.2
195				0.3										0.3
200														
205														
SUP	1.7	0.6	4.4	30.7	19.7	8.4	1.6	1.0	0.1					67.8

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.4									0.4
180	1.7	0.1	2.3	6.3	7.4	2.1	0.1		0.1					20.1
185		0.2	5.7	14.7	10.7	6.8	1.6							39.8
190			1.0	2.8	3.2	0.1	0.1							7.2
195					0.7									0.3
200														
205														
SUM	1.7	0.3	9.2	23.9	21.4	9.0	1.8		0.1					67.8

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB														-600,	BY	OAT	80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS					0.1									0.1				
180	0.1		0.2	6.9	5.1	2.2	0.1							14.7				
185	0.1		1.7	4.7	4.5	3.2	0.5							14.7				
190			0.5	0.9	0.5	0.3			0.3					2.5				
195																		
200																		
205																		
SUP	0.2		2.4	12.5	10.7	5.7	0.6		0.3					31.9				

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.1									0.1
180	0.2	0.1	0.5	5.8	6.1	2.0								14.7
185	0.1	0.5	3.7	2.7	5.1	2.2	0.3							14.7
190			0.2	0.4	1.4	0.1	0.0	0.3						2.5
195														
200														
205														
SUM	0.3	0.6	4.4	9.0	12.7	4.3	0.3	0.3						31.9

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.1	0.5	0.3	0.4	0.0	0.1	0.2						2.1
185	0.1	0.2	0.1	1.3	1.7	1.3	1.7	0.1	0.1					5.1
190			0.2	0.2	0.4									0.8
195			0.1											0.1
200														
205														
SUM	0.1	0.3	0.9	1.8	2.4	1.4	0.6	0.3	0.1					8.1

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY DAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.2	0.5	0.4	0.4	0.5	0.6	0.1						2.1
185	0.2	0.3	2.3	1.0	0.7	0.5							5.1
190		0.2	0.3	0.1	0.2								0.8
195		0.1											0.1
200													
205													
SUM	0.4	1.1	3.0	1.5	1.4	0.6	0.1						6.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY DAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	1.8	0.5	1.8	22.8	14.9	4.6	0.5	0.2	0.1				47.2
185	0.2	1.2	6.7	35.9	19.4	11.3	2.5	1.0	0.1				78.1
190			1.7	4.5	3.4	2.0	0.4	0.1	0.3				12.4
195			0.1	0.3									0.4
200													
205													
SUM	2.0	1.7	10.2	64.0	38.2	17.9	3.4	1.3	0.5				139.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY DAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	1.9	0.4	5.1	17.7	16.5	5.3	0.1	0.1	0.1				47.2
185	0.1	1.1	14.8	27.5	21.6	10.7	2.4						78.1
190			1.5	4.9	5.2	0.4	0.1	0.3					12.4
195			0.1	0.3									0.4
200													
205													
SUM	2.0	1.5	20.4	50.1	44.0	16.4	2.7	0.4	0.1				139.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY DAT 40													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180			1.4	1.8									3.3
185													
190													
195													
200													
205													
SUM			1.4	1.8									3.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY DAT 40													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180			0.9	2.4									3.3
185													
190													
195													
200													
205													
SUM			0.9	2.4									3.3



TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT													50	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				3.6	7.									3.6
180			1.4	29.5	41.1	2.4								74.4
185			14.4	23.1	1.8									44.3
190			1.1	5.2										7.3
195														
200														
205														
SUM			21.8	61.4	43.0	2.4								129.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY OAT													50	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				2.4	1.4									3.8
180		2.9		9.0	51.3	11.3								74.4
185		3.3	25.7	10.9	4.2									44.3
190			2.4	3.1	1.8									7.3
195														
200														
205														
SUM		6.2	28.3	25.3	58.7	11.3								129.7

MINUTES FOR TORQUE: VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT													60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														13.9
190	38.7	3.8	43.8	162.1	94.7	28.1	4.0	0.5						371.9
195	5.8	10.3	47.9	302.9	186.8	69.8	34.8	2.3						660.5
190			13.5	131.0	85.9	23.5	1.5							255.3
195			3.6	4.2	1.0									5.7
200														
205														
SUM	44.5	14.1	104.4	612.0	367.7	121.3	40.3	2.8						1307.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY OAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			2.1	7.2	4.6									13.9
180	38.7	13.9	61.7	127.2	94.7	28.1	7.5							371.9
185	5.8	1.0	131.2	220.0	229.8	56.1	15.6							660.5
190			34.1	118.9	95.1	6.2	1.0							255.3
195				4.8	1.0									5.7
200														
205														
SUM	44.5	14.9	223.2	478.0	425.2	90.5	25.0							1307.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				2.4	14.0	2.5								18.9
180	43.0	3.3	33.7	98.9	162.7	61.2	11.4	0.4	0.7	0.3	1.0			416.2
195	4.0	3.7	104.8	443.2	476.4	227.5	30.9	12.7	0.9					1304.5
190		2.5	23.8	133.2	121.3	82.7	16.4	1.4						381.8
175				8.9										8.9
200														
205														
SUM	47.0	9.5	162.3	686.6	774.4	374.0	58.7	14.5	1.6	0.3	1.0			2130.3

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY OAT 70													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180	45.9	3.6	52.1	76.2	159.4	65.0	13.9	1.2	0.2	0.7			18.9
185	3.5	3.8	148.2	420.2	416.7	271.6	39.5	1.4					416.2
190		0.6	25.1	128.3	113.1	107.6	7.0						1304.5
195				3.1	4.1	1.7							381.8
200													8.9
205													
SUM	47.5	8.1	225.7	628.9	701.5	454.9	60.4	2.6	0.2	0.7			2130.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 80													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180	7.8	2.0	5.1	63.5	84.4	91.3	7.8						2.6
185	1.7	6.4	24.6	139.5	136.1	91.8	24.4	2.2	1.9	0.3			252.0
190	0.1	0.2	8.5	13.4	14.8	12.5	0.7	2.8	0.3	0.1			429.0
195					1.2								53.4
200													1.2
205													
SUM	9.6	8.6	38.2	216.4	237.1	187.8	32.9	5.0	2.2	0.4			738.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY OAT 80													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180	7.8	5.4	14.7	47.4	94.1	78.4	7.2						2.6
185	0.6	12.5	75.3	106.3	107.0	98.3	25.3	1.1	1.5				252.0
190	1.5	1.6	4.9	14.2	18.1	9.9	2.9	0.3	0.2				429.0
195				0.3	0.0								53.4
200													1.2
205													
SUM	9.9	19.5	92.9	168.1	220.0	199.2	35.5	1.4	1.8				738.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 90													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180	0.4		1.4	25.4	19.9	6.8	2.5	1.4					0.7
185	0.2	4.3	1.7	65.3	59.5	26.8	8.5	5.5	2.1				57.8
190	0.2	0.3	0.2	8.4	9.7	3.4	4.6	0.2					181.5
195					0.2	1.3							26.3
200													1.5
205													
SUM	0.8	4.6	10.7	99.3	88.6	38.3	15.5	7.4	2.1				267.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY OAT 90													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180	0.3	2.1	9.4	31.0	11.4	1.8	1.5	0.1					0.7
185	0.1	3.4	24.1	79.4	51.0	11.7	10.3	1.2	0.3				57.8
190	0.1	0.1	0.1	9.4	4.5	3.3	3.8						181.5
195					1.5								26.3
200													1.5
205													
SUM	0.5	5.6	33.9	119.9	69.5	16.7	16.1	1.3	0.3				267.8

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	89.9	9.1	82.5	380.8	403.4	179.8	25.6	2.3	0.7	0.3	1.0		1175.5
185	1.7	24.7	205.5	974.0	860.9	415.9	99.1	22.6	4.9	3.3			2619.7
190	0.3	3.0	48.1	291.1	231.5	122.1	23.1	4.3	0.3	0.1			724.1
195			0.6	13.1	2.3	1.3							17.3
200													
205													
SUM	102.9	36.8	33.4	1677.2	1513.8	723.6	147.8	29.6	6.0	0.8	1.0		4576.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	90.7	27.9	134.9	291.7	413.3	184.6	33.1	1.3	0.2	0.7			1175.5
185	10.1	24.0	405.7	836.6	808.3	437.6	91.7	3.7	1.9				2619.7
190	1.6	2.3	7.5	273.8	232.4	127.1	14.8	0.3	0.2				724.1
195				8.2	7.4	1.7							17.3
200													
205													
SUM	102.4	54.2	614.7	1421.1	1476.7	762.6	137.6	5.3	2.3	0.7			4576.6

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY DAT													40
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1										0.1
185													
190													
195													
200													
205													
SUM			0.1										0.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY DAT													40
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.1
185													
190													
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY DAT													50
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.5	0.1									0.7
185		0.5	0.2	0.1									0.9
190													
195													
200													
205													
SUM		0.5	0.7	0.1									1.5

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.4	0.2									0.7
185			0.4	0.3	0.1									0.9
190														
195														
200														
205														
SUM			0.4	0.7	0.5									1.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.3		0.5	1.9	2.4	0.5								5.8
185			1.0	8.7	6.4	1.4	0.4							17.9
190			0.3	2.7	0.6	0.4								4.0
195														
200														
205														
SUP	0.3		1.7	13.3	9.4	2.3	0.4							27.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.3		0.6	3.3	0.9	0.9								5.8
185			2.4	10.0	4.3	1.2	0.3							17.9
190			0.2	2.7	1.1									4.0
195														
200														
205														
SUM	0.3		3.2	16.0	5.7	2.1	0.3							27.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, HY RATE OF CLIMB										300,	BY	OAT	70	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	1.4		0.6	5.4	6.1	1.3								14.8
185	0.1	0.1	4.8	15.6	10.5	6.1	1.3	0.8	0.3					39.6
190			0.1	4.4	5.0	2.0	1.5	0.2						13.4
195				0.2										0.2
200														
205														
SUP	1.5	0.1	5.5	25.6	21.7	9.4	2.7	1.1	0.3					68.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	1.2	0.1	0.7	4.3	7.7	0.9	0.4							14.8
185	0.2	0.2	4.6	15.2	11.1	7.3	1.0							39.6
190		0.1	0.6	5.3	4.1	2.0	1.3							13.4
195				0.1	0.1									0.2
200														
205														
SUM	1.4	0.4	5.1	24.9	22.7	10.2	1.6							68.0

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB													300,	BY OAT	90	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			
180	0.1		0.2	2.8	2.9	1.7		0.0							7.7	
185	0.1		1.1	6.0	4.1	1.2	1.2	0.3		0.1					14.1	
190			0.1	1.5		0.3	0.1								2.0	
195																
200																
205																
SUM	0.2		1.4	10.3	7.0	3.2	1.3	0.3		0.1					23.9	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB										300 ,		BY	OAT	80	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180	0.1	0.4	1.0	2.0	3.1	1.4	0.1	0.1	0.1						7.7
185			2.0	5.0	3.7	2.0	0.8								14.1
190	0.1		0.2	1.1	0.2	0.3									2.0
195															
200															
205															
SUM	0.2	0.4	3.2	8.1	7.1	3.8	0.9	0.1	0.1						23.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB										300,	BY	OAT	90	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.2			0.3	0.2	0.3	0.2	0.3						1.6
185	0.1	0.3	0.4	2.4	1.2	0.5	0.3	0.2	0.1					5.4
190		0.1		0.4	0.0	0.1	0.1	0.1						0.8
195			0.1											0.1
200														
205														
SUM	0.3	0.4	0.6	3.1	1.3	0.9	0.6	0.6	0.1					8.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB										300 ,	BY	OAT	90	SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS														
180	0.1	0.2	0.2	0.6	0.1	0.2	0.2							1.6
185	0.2	0.2	0.8	2.6	1.1	0.1	0.1	0.2	0.1					5.4
190			0.2	0.3	0.1		0.2							0.8
195			0.1											0.1
200														
205														
SUM	0.3	0.4	1.3	3.5	1.2	0.3	0.5	0.2	0.1					8.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB													300, BY OAT	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	2.0		1.4	11.0	12.0	3.8	0.2	0.3						30.7
185	0.3	0.4	7.7	33.0	22.3	9.2	3.1	1.3	0.4	0.1				78.0
190		0.1	0.5	9.0	5.7	2.9	1.7	0.3						20.2
195			0.1	0.2										0.3
200														
205														
SUM	2.3	0.5	9.9	53.2	40.7	15.8	5.0	2.0	0.4	0.1				129.3

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300 , BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	1.7	0.3	2.7	10.5	11.4	3.4	0.7						30.7
185	0.4	0.8	10.1	33.2	20.7	10.7	2.2	0.3	0.2				78.0
190	0.1	0.1	1.3	9.5	5.5	2.3	1.5						20.2
195			0.1	0.1	0.1								0.3
200													
205													
SUM	2.2	1.2	14.2	53.2	37.7	16.4	4.4	0.3	0.2				129.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 500 , BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1										0.1
185													
190													
195													
200													
205													
SUM			0.1										0.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.1
185													
190													
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 500 , BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.2
185			0.6		0.2								0.8
190		0.3	0.5	0.1									1.0
195		0.2											0.2
200													
205													
SUM		0.5	1.1	0.4	0.2								2.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY DAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.2										0.2
185			0.4	0.4									0.8
190		0.2	0.8										1.0
195		0.2											0.2
200													
205													
SUM		0.4	1.4	0.4									2.1

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2									0.2
180	0.4		0.5		0.2		0.1						1.2
185		0.4	1.4	1.5	0.6	0.4	0.3						4.4
190		0.1	0.8	0.4	0.2								1.7
195		0.1											0.1
200													
205													
SUM	0.4	0.5	2.7	2.1	1.0	0.4	0.4						7.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.2								0.2
180	0.4		0.2	0.3	0.2		0.1						1.2
185		1.0	1.8	0.7	0.6	0.2							4.4
190		0.3	0.7	0.5	0.2								1.7
195		0.1											0.1
200													
205													
SUM	0.4	1.6	2.8	1.5	1.2	0.2	0.1						7.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2									0.3
180	0.1			0.7	0.7								2.1
185		0.3	0.4	0.3					0.0				0.6
190		0.1	0.2	0.3				0.0					0.1
195				0.1									
200													
205													
SUM	0.1	0.4	0.6	1.3	0.7			0.0	0.0				3.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2									0.3
180	0.1	0.1		0.2	0.9			0.0					2.1
185		0.6	0.3	0.5									0.6
190		0.1		0.1									0.1
195													
200													
205													
SUM	0.1	0.1	0.7	1.0	0.9		0.0	0.0					3.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.0								0.0
180					0.1								0.1
185	0.4	0.5	0.3	0.3	0.2								1.7
190													
195													
200													
205													
SUM	0.4	0.5	0.3	0.3	0.4								1.9

TABLE VIII - Continued

MINUTES FOR TORQUE <sub>2</sub> VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY DAT													90	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.0													0.0
180		0.0					0.1							0.1
185		0.2	0.4	0.7	0.7	0.2								1.7
190														
195														
200														
205														
SUM	0.0	0.3	0.4	0.7	0.7	0.2	0.1							1.9

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE CF CLIMB 600, BY DAT													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.2	0.0								0.2
180	0.4	0.1		0.6	0.4	0.3		0.1						2.0
185		0.4	1.2	2.6	2.3	1.7	0.4	0.3		0.0				9.0
190			0.5	1.5	1.1	0.2			0.0					3.3
195			0.2		0.1									0.3
200														
205														
SUM	0.4	0.5	2.0	4.7	4.1	2.3	0.4	0.4	0.0	0.0				14.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB										600 ,	BY	DAT	SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.0					0.2								0.2
180	0.4	0.2	0.2	0.5	0.3	0.2	0.1	0.1						2.0
185	0.1	0.2	2.1	3.3	1.5	1.7	0.2		0.0					9.0
190			0.6	1.5	1.0	0.2		0.0						3.3
195			0.2		0.1									0.3
200														
205														
SUM	0.6	0.4	3.1	5.2	2.9	2.3	0.3	0.1	0.0					14.9

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 900, BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1

MINUTES FOR TORQUE <sub>2</sub> VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 900 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1



TABLE VIII - Continued

MINUTES FOR TORQUE, VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 900, BY DAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 900 , BY DAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG MCIST , BY RATE OF CLIMB -1200, BY DAT TO													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180					0.0	0.0							0.1
185						0.1							0.1
190													
195													
200													
205													
SUM					0.0	0.1							0.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG MCIST , BY RATE OF CLIMB -1200 , BY DAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.1
185						0.1							0.1
190													
195													
200													
205													
SUM				0.1		0.1							0.2

MINUTES FOR TORQUE, VS RPM BY MISSION SEG MCIST, BY RATE OF CLIMB -1200, BY DAT														8J
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1									0.1
190														
195														
200														
205														
SUM					0.1									0.1

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -1200 , BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185		0.1											0.1
190													
195													
200													
205													
SUM		0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -1200 , BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185							0.0		0.0				0.1
190													
195													
200													
205													
SUM							0.0		0.0				0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -1200 , BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185						0.0	0.0						0.1
190													
195													
200													
205													
SUM						0.0	0.0						0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -1200 , BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180					0.0	0.0							0.1
185				0.1		0.1	0.0		0.0				0.3
190													
195													
200													
205													
SUM				0.1	0.0	0.1	0.0		0.0				0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -1200 , BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180				0.1									0.1
185		0.1				0.1	0.0						0.3
190													
195													
200													
205													
SUM		0.1		0.1		0.1	0.0						0.4

TABLE VIII - Continued

MINUTES FOR TORQUE. VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -900, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180							0.1							0.1
185					0.1									0.1
190														
195														
200														
205														
SUM					0.1		0.1							0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -900 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180							0.1							0.1
185			0.1											0.1
190														
195														
200														
205														
SUM			0.1				0.1							0.2

MINUTES FOR TORQUE, VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -900, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185							0.0	0.0						0.1
190								0.1						0.1
195														
200														
205														
SUM							0.0	0.1						0.2

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -900 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185						0.0	0.0							0.1
190							0.1							0.1
195														
200														
205														
SUM						0.0	0.1							0.2

MINUTES FOR TORQUE, VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -900, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180						0.0							0.0
185					0.2	0.2	0.1						0.6
190													
195													
200													
205													
SUM					0.2	0.4	0.1						0.6

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -900 , BY CAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180								0.0						0.0
185					0.1	0.2	0.2	0.0						0.6
190														
195														
200														
205														
SUM					0.1	0.2	0.2	0.1						0.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -900, BY CAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180							0.2							0.2
185					0.1	0.2	0.4	0.1						0.8
190								0.1						0.1
195														
200														
205														
SUM					0.1	0.2	0.5	0.2						1.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -900 , BY CAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180						0.1	0.0						0.2	
185		0.1		0.1	0.3	0.3	0.0						0.8	
190						0.1							0.1	
195														
200														
205														
SUM		0.1		0.1	0.3	0.5	0.1						1.0	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -600, BY CAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180						0.1	0.1							0.2
185														
190														
195														
200														
205														
SUM						0.1	0.1							0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -600 , BY CAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.0	0.1							0.2
180														
185														
190														
195														
200														
205														
SUM						0.0	0.1							0.2

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -600, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1					0.0	0.0	0.2						0.4
185				0.1			0.1	0.4						0.6
190														
195														
200														
205														
SUM	0.1			0.1		0.0	0.2	0.6						1.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -600 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1				0.1	0.0	0.1	0.1						0.4
195			0.1		0.3	0.1		0.1						0.6
190														
195														
200														
205														
SUM	0.1		0.1		0.4	0.2	0.1	0.2						1.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -600, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180						0.1							0.1
185			0.1	0.1	0.0	0.1	0.0		0.1				0.6
190				0.1									0.1
195													
200													
205													
SUM			0.1	0.1	0.0	0.2	0.0		0.1				0.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -600 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180						0.1								0.1
185			0.1	0.2		0.2	0.0	0.0						0.6
190			0.1											0.1
195														
200														
205														
SUM			0.2	0.2		0.3	0.0	0.0						0.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -600, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1		0.1							0.2
185			0.1		0.5	0.2	0.5	0.0	0.0				1.4
190					0.2		0.1						0.3
195													
200													
205													
SUM			0.1	0.1	0.7	0.3	0.6	0.0	0.0				1.8

TABLE VIII - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -600 , BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1	0.1	0.0							0.2
185		0.2	0.1	0.0	0.4	0.7	0.0						1.4
190					0.1	0.2							0.3
195													
200													
205													
SUM		0.2	0.1	0.1	0.5	0.9	0.0						1.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -600, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1			0.1	0.1	0.3	0.2						0.8
185			0.3	0.1	0.6	0.5	0.9	0.0	0.1				2.6
190				0.1	0.2		0.1						0.4
195													
200													
205													
SUM	0.1		0.3	0.4	0.9	0.8	1.2	0.0	0.1				3.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -600 , BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1			0.1	0.2	0.3	0.1						0.8
185		0.4	0.3	0.4	0.7	0.7	0.2						2.6
190		0.1			0.1	0.2							0.4
195													
200													
205													
SUM	0.1	0.5	0.3	0.5	1.0	1.2	0.3						3.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -300, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.1
185				0.1									0.1
190													
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -300 , BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185		0.1											0.1
190		0.1											0.1
195													
200													
205													
SUM		0.1											0.1

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -300, BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.3	0.4	0.3		0.0					0.7
185	0.1			0.4	0.1	0.1	0.4	0.0	0.1					1.2
190				0.1			0.2							0.3
195				0.1										0.1
200														
205														
SUM	0.1			0.6	0.1	0.5	0.6	0.0	0.1					2.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -300, BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.3	0.2	0.1	0.1						0.7
185	0.1		0.2	0.3	0.2	0.2	0.3							1.2
190			0.1	0.1		0.1	0.2							0.3
195				0.1										0.1
200														
205														
SUM	0.1		0.2	0.5	0.5	0.4	0.6	0.1						2.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -300, BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1				0.1	0.2	0.2		0.1		0.1			0.7
185					0.1	0.2	0.4	0.5						1.2
190							0.1	0.2						0.3
195							0.1							0.1
200														
205														
SUM	0.1				0.2	0.3	0.6	0.7	0.1		0.1			2.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -300 , BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1		0.1	0.1			0.2	0.1		0.1				0.7
185			0.1		0.1	0.3	0.3	0.3						1.2
190						0.2	0.1							0.3
195							0.1							0.1
200														
205														
SUM	0.1		0.2	0.1	0.1	0.5	0.7	0.4		0.1				2.3

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB -300, BY DAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1	0.1	0.1	0.1						0.4
185				0.0	0.4	0.5	0.1	0.1						1.2
190				0.0			0.2							0.2
195														
200														
205														
SUM				0.1	0.5	0.6	0.4	0.2						1.8

TABLE VIII - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -300 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1			0.2	0.1							0.4
185				0.2	0.1	0.3	0.5	0.1						1.2
190					0.1	0.1								0.2
195														
200														
205														
SUP			0.1	0.2	0.1	0.6	0.6	0.1						1.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -300 , BY DAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1				0.2	0.6	0.6	0.1	0.1		0.1			1.8
185	0.1			0.4	0.7	0.8	0.5	0.6	0.1					3.6
190				0.2	0.1		0.5	0.2						0.9
195				0.1			0.1							0.2
200														
205														
SUP	0.2			0.7	0.9	1.4	2.1	0.9	0.2		0.1			6.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB -300 , BY DAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1		0.2	0.1	0.3	0.4	0.4	0.2		0.1				1.8
185	0.1		0.3	0.5	0.4	0.8	1.2	0.4						3.6
190			0.1	0.1	0.1	0.3	0.3							0.9
195				0.1			0.1							0.2
200														
205														
SUM	0.2		0.6	0.8	0.9	1.6	2.0	0.6		0.1				6.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB 300 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185						0.1	0.1		0.1					0.3
190														
195														
200														
205														
SUP						0.1	0.1		0.1					0.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MOIST , BY RATE OF CLIMB 300 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1		0.2							0.3
190														
195														
200														
205														
SUM					0.1		0.2							0.3



TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB 300, BY DAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.2		0.0	0.2							0.4
190													
195													
200													
205													
SUM			0.2		0.0	0.2							0.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB 300, BY DAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.1	0.2	0.0								0.4
190													
195													
200													
205													
SUM			0.1	0.2	0.0								0.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB 300, BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185				0.2	0.3	0.1	0.1						0.7
190						0.1	0.1						0.2
195													
200													
205													
SUM				0.2	0.3	0.2	0.2						0.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB 300, BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185		0.1	0.1	0.1	0.2	0.1							0.7
190					0.1	0.0	0.0						0.2
195													
200													
205													
SUM		0.1	0.1	0.1	0.3	0.2	0.0						0.9

MINUTES FOR TORQUE VS RPM BY MISSION SEG MOIST, BY RATE OF CLIMB 300, BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.2	0.2	0.4	0.4	0.1	0.1					1.4
190						0.1	0.1						0.2
195													
200													
205													
SUM			0.2	0.2	0.4	0.5	0.2	0.1					1.6

TABLE VIII - Continued

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 300 , BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.1	0.2	0.5	0.3	0.4							1.4
185					0.1	0.0	0.0						0.2
190													
195													
200													
205													
SUM		0.1	0.2	0.5	0.4	0.4	0.0						1.6

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600 , BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.1
185													
190													
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600 , BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1										0.1
185													
190													
195													
200													
205													
SUM			0.1										0.1

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600 , BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1	0.1	0.1								0.3
185													
190													
195													
200													
205													
SUM			0.1	0.1	0.1								0.3

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600 , BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1	0.1								0.3
185													
190													
195													
200													
205													
SUM			0.1	0.1	0.1								0.3

TABLE VIII - Continued

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600, BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185				0.1	0.0								0.2
190													
195													
200													
205													
SUM				0.1	0.0								0.2

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600, BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185					0.1	0.0							0.2
190													
195													
200													
205													
SUM					0.1	0.0							0.2

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600, BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180				0.1									0.1
185			0.1	0.2	0.1								0.5
190													
195													
200													
205													
SUM			0.1	0.4	0.1								0.6

MINUTES FOR TORQUE, VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600, BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180			0.1										0.1
185		0.1		0.1	0.2	0.0							0.5
190													
195													
200													
205													
SUM		0.1	0.1	0.1	0.2	0.0							0.6

MINUTES FOR TORQUE, VS RPM BY MISSION SEG SUM, BY RATE OF CLIMB SUM, BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	3.2	3.3	4.4	25.0	25.0	10.9	0.5	1.2	0.1				80.5
180	274.9	134.7	270.5	746.3	792.1	342.6	160.5	54.3	7.3	1.1	1.4		2531.3
185	170.5	287.7	556.0	1864.2	1675.4	928.0	434.8	169.1	38.5	10.1	0.7		6235.3
190	36.5	62.0	156.7	569.1	461.7	305.9	125.7	45.8	7.9	1.1			1773.7
195	0.6	0.5	3.3	16.8	7.4	4.1	4.4	1.7	0.4				39.3
200													
205													
SUM	491.4	488.2	1095.9	3221.5	2961.1	1631.6	727.0	273.1	54.8	12.3	2.1		10960.1

TABLE VIII - Concluded

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG											SUM, BY RATE OF CLIMB				SUM, BY DAT			
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS	6.5	6.3	7.4	17.5	22.2	15.3	5.2	0.2						80.5				
130	295.1	255.9	399.3	587.5	699.5	403.5	165.4	39.5	7.2	0.9				2831.3				
145	55.6	362.2	1061.7	1547.0	1496.1	958.7	403.4	134.8	17.8					6235.3				
170	40.4	45.3	234.7	529.1	489.1	293.5	105.1	40.5	2.0					1773.7				
195	1.7	0.6	2.5	12.0	10.7	4.0	3.8	2.3	0.2					39.3				
200																		
235																		
SUM	504.3	650.4	1599.3	2693.1	2717.7	1665.0	685.0	217.3	27.2	0.9				10960.1				

TABLE IX. TIME FOR ENGINE TORQUE 1 VERSUS ENGINE TORQUE 2, SAMPLE I

MINUTES FOR TORQUE1 VS TORQUE2														SUM			
	LESS	10	20	30	40	50	60	70	80	90	100	110	120				
LESS	269.8	57.4	106.0	96.5	27.6	4.8	1.9	0.2						604.3			
10	57.7	165.9	176.5	205.5	80.8	19.6	3.8	1.0						650.9			
20	99.1	180.6	455.6	690.3	239.7	27.1	6.5	0.4						1699.3			
30	49.9	78.0	310.9	1322.2	775.5	135.7	15.5	5.1	0.1					2693.1			
40	13.7	22.6	43.4	799.9	1258.0	438.5	119.9	20.8	0.3	0.1				2717.2			
50	1.1	3.2	4.0	101.9	540.3	754.1	205.1	52.0	3.0	0.2				1665.0			
60	0.1	0.3	0.4	4.9	38.8	241.9	271.8	96.4	27.7	2.6	0.7			685.0			
70		0.2		0.2	0.4	9.9	97.9	83.1	16.5	7.7	1.3			217.3			
80		0.1					4.4	13.9	7.5	1.3				27.2			
90									0.3	0.4	0.1			0.9			
100																	
110																	
120																	
SUM	491.4	488.2	1796.9	3221.4	2961.1	1631.6	727.0	273.1	54.4	12.3	2.1			10960.1			

TABLE X. CYCLIC STEADY VERSUS CYCLIC PEAKS BY COLLECTIVE  
STEADY (MISSION SEGMENT 4), SAMPLE I

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											30
LESS	10	20	30	40	50	60	70	80	90	SUM	
LESS											
-40											
-30											
-20											
-10											
10					1					1	
20											
30											
40											
SUM					1					1	
TIME	0.	0.	0.	0.	23.4	51.6	21.0	25.4	0.7	0.	122.1

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											40
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20								2			2
-10											
10						1	1				2
20											
30											
40											
SUM						1	1	2			4
TIME	0.	0.	2.2	22.2	626.0	645.3	178.3	64.4	9.7	0.	1548.2

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											50
LESS	LFSS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20						1	5	2			8
-10											
10						6	5	1			12
20						1					1
30											
40											
SUM						8	10	3			21
TIME	0.	0.	4.5	118.9	724.7	831.9	207.6	63.5	6.7	0.	1957.8

TABLE X - Concluded

CYCLIC STEADY VS CYCLIC PEAKS BY CELL. STEADY 60											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20								2			2
-10											
10							4				4
20											
30											
40											
SUM							4	2			6
TIME	0.	0.	0.	39.3	795.1	543.7	59.8	25.3	0.	0.	1463.2

CYCLIC STEADY VS CYCLIC PEAKS BY CELL. STEADY 70											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20											
-10											
10						1					1
20											
30											
40											
SUM						1					1
TIME	0.	0.	0.	9.5	186.8	54.9	18.7	0.6	0.	0.	310.5

TABLE XI. CYCLIC STEADY VERSUS CYCLIC PEAKS BY ALTITUDE  
(MISSION SEGMENT 4), SAMPLE I

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE LESS											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20								1			1
-10											
10											
20											
30											
40											
SUM								1			1
TIME	0.	0.	0.	0.	0.	7.7	18.3	12.0	0.	0.	38.1

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE 1000											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20							3	3			6
-10											
10						3	4				7
20						1					1
30											
40											
SUM						4	7	3			14
TIME	0.	0.	0.	0.	4.3	47.7	154.7	46.3	3.7	0.	256.7

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE 2000											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						1	2	2			5
-10											
10						6	6	1			13
20											
30											
40											
SUM						7	8	3			18
TIME	0.	0.	6.7	143.6	1579.8	1239.3	234.3	77.1	13.4	0.	3294.3

TABLE XII. CYCLIC STEADY VERSUS CYCLIC PEAKS BY AIRSPEED  
(MISSION SEGMENT 4), SAMPLE I

CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						1	5	6			12
-10											
10						9	10	1			20
20						1					1
30											
40											
SUM						11	15	7			33
TIME	0.	0.	0.	0.	1.8	93.8	327.4	133.3	17.1	0.	573.4

TABLE XIII. CYCLIC STEADY VERSUS CYCLIC PEAKS BY ROTOR  
RPM (MISSION SEGMENT 4), SAMPLE I

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 180											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						1		2			3
-10											
10						2	1	1			4
20						1					1
30											
40											
SUM						4	1	3			8
TIME	0.	0.	6.7	50.7	518.9	566.4	140.1	69.4	8.3	0.	1359.5



TABLE XIII - Concluded

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 190											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20											
-10											
10						1					1
20											
30											
40											
SUM						1					1
TIME	0.	0.	0.	22.3	369.2	409.3	51.5	14.8	0.6	0.	867.8

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 195											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20							5	4			9
-10											
10						6	9				15
20											
30											
40											
SUM						6	14	4			24
TIME	0.	0.	0.	124.0	1447.8	1164.8	289.0	94.4	8.0	0.	3121.0

CYCLIC STEADY VS CYCLIC PEAKS BY RPM SUM											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20						1	5	6			12
-10											
10						9	10	1			20
20						1					1
30											
40											
SUM						11	15	7			33
TIME	0.	0.	6.7	197.0	2356.1	2167.4	495.6	179.2	17.1	0.	5409.1

TABLE XIV. AIRSPEED ACCELERATION VERSUS CYCLIC PEAKS  
BY MISSION SEGMENT, SAMPLE I

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT												
LFSS	LFSS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
-40						8	1					9
-30						265	13					278
-20					2	377	16					395
-10												
10						12						12
20												
30												
40												
SUM					2	662	30					694

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR												
LESS	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
-40												
-30						2						2
-20						3						3
-10												
10												
20												
30												
40												
SUM						5						5

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT												
LFSS	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
-40						1						1
-30						6						6
-20						192						192
-10						374	7	1				382
10					1	20						21
20												
30												
40												
SUM					1	593	7	1				602

TABLE XV. ROTOR RPM VERSUS CYCLIC PEAKS BY MISSION  
SEGMENT, SAMPLE I

RPM VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT								
	LESS	180	185	190	195	200	205	SUM
LESS								
-40		4	5					9
-30	1	52	168	56	1			278
-20	1	104	222	65	3			395
-10								
10		8	3	1				12
20								
30								
40								
SUM	2	168	198	122	4			694
TIME	14.6	731.6	1871.3	556.8	15.2	0.	0.	3189.6

RPM VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR								
	LESS	180	185	190	195	200	205	SUM
LESS								
-40								
-30			2					2
-20		1	2					3
-10								
10								
20								
30								
40								
SUM		1	4					5
TIME	0.	14.1	41.5	0.6	0.	0.	0.	56.1

TABLE XV - Concluded

RPM VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT								
	LESS	180	185	190	195	200	205	SUM
LESS			1					1
-40		4	2					6
-30		41	114	37				192
-20	4	93	214	71				382
-10								
10		10	10	1				21
20								
30								
40								
SUM	4	148	341	109				602
TIME	25.3	950.6	2024.4	547.2	6.6	0.	0.	3554.2

RPM VS CYCLIC PEAKS BY MISSION SEGMENT STEADY								
	LESS	180	185	190	195	200	205	SUM
LESS								
-40								
-30								
-20		3	9					12
-10								
10		4	15	1				20
20		1						1
30								
40								
SUM		8	24	1				33
TIME	41.3	1359.5	3121.0	867.8	19.5	0.	0.	5409.0

TABLE XVI. AIRSPEED VERSUS CYCLIC PEAKS BY MISSION  
SEGMENT, SAMPLE I

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40	1	1	1	1	1	2	1	1								9
-30	47	42	21	41	31	31	24	18	15	5	2	1				278
-20	91	52	27	39	34	35	39	33	30	12	2	1				395
-10																
10	12															12
20																
30																
40																
SUM	141	55	49	81	66	68	64	52	45	17	4	2				694
TIME	510.8	715.2	413.0	398.4	304.8	253.0	221.4	161.7	118.0	67.6	22.2	3.2	0.2	0.	0.	3189.6

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40																
-30						1				1						2
-20							1	1				1				3
-10																
10																
20																
30																
40																
SUM						1	1	1		1		1				5
TIME	0.	0.1	0.1	0.3	1.6	3.7	9.3	15.2	14.7	7.6	3.1	0.3	0.1	0.	0.	56.1

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40			1		1		2		2			1				6
-30	4	4	9	12	26	34	17	25	22	20	10		2			192
-20	44	29	21	31	31	32	32	52	53	33	17	5	2			382
-10																
10	10	1				1										21
20																
30																
40																
SUM	67	34	31	43	61	67	51	77	77	53	27	6	4			602
TIME	484.0	496.1	246.6	291.7	324.9	308.7	319.6	351.6	357.4	227.5	102.6	32.7	9.7	1.0	0.	3554.2

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40																
-30																
-20	12															12
-10																
10	20															20
20	1															1
30																
40																
SUM	33															33
TIME	573.4	221.4	267.9	442.7	499.5	453.3	557.8	717.6	933.7	460.1	168.6	37.0	42.2	3.1	0.	5409.1

TABLE XVII. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS  
BY CYCLIC STEADY (MISSION SEGMENT 4), SAMPLE I

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											40
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20					1		3				4
-10											
10								1			1
20											
30											
40											
SUM					1		3	1			5
TIME	0.	0.	0.	23.4	626.0	724.7	795.1	186.8	0.	0.	2356.1

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											50
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30						1	1				2
-20				1		9	4	1			15
-10											
10					1	4	1				6
20						1					1
30											
40											
SUM				1	1	15	6	1			24
TIME	0.	0.	0.	51.6	645.3	831.9	543.7	94.9	0.	0.	2167.4

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											60
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30				1		6	4	3			14
-20					2	18	17	6			43
-10											
10				1	4	17	5	1			28
20				1	1	2	1				5
30						1					1
40											
SUM				3	7	44	27	10			91
TIME	0.	0.	0.	21.0	178.3	207.6	59.8	18.7	0.2	0.	485.6

TABLE XVII - Concluded

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 70											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30							9	2			11
-20					1	8	14				23
-10											
10					1	13	1				15
20						2					2
30											
40											
SUM					2	23	24	2			51
TIME	0.	0.	0.	25.4	64.4	63.5	25.3	0.6	0.	0.	179.2

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											80
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						3					3
-10											
10											
20											
30											
40											
SUM						3					3
TIME	0.	0.	0.	0.7	9.7	6.7	0.	0.	0.	0.	17.1

TABLE XVIII. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS  
BY ALTITUDE (MISSION SEGMENT 4), SAMPLE I

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30						2	1				3
-20					1	2	2				5
-10											
10						1					1
20											
30											
40											
SUM					1	5	3				9
TIME	0.	0.	0.	6.2	17.6	9.0	5.3	0.	0.	0.	38.1

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 1000											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30						4	7	2			13
-20						13	14	1			28
-10											
10				1	4	14	4				23
20				1		2	1				4
30						1					1
40											
SUM				2	4	34	26	3			69
TIME	0.	0.	0.	11.8	98.5	56.4	44.7	5.3	0.	0.	256.7

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 2000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30				1		1	6	3			11
-20				1	2	23	20	6			52
-10											
10					2	19	3	1			25
20					1	3					4
30											
40											
SUM				2	5	46	29	10			92
TIME	0.	0.	0.	66.4	932.9	1274.4	841.2	179.1	0.2	0.	3294.3



TABLE XVIII - Concluded

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 5000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20					1		2				3
-10											
10								1			1
20											
30											
40											
SUM					1		2	1			4
TIME	0.	0.	0.	37.7	499.1	578.1	572.0	126.1	7.1	0.	1820.0

TABLE XIX. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY AIRSPEED (MISSION SEGMENT 4), SAMPLE I

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30				1		7	14	5			27
-20				1	2	39	34	7			82
-10											
10				1	6	34	6	1			48
20				1	1	5	1				8
30						1					1
40											
SUM				4	9	85	55	13			166
TIME	0.	0.	0.	30.1	205.6	220.1	88.4	29.0	0.2	0.	573.4

TABLE XIX - Continued

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 60											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20											
-10											
10							1				1
20											
30											
40											
SUM							1				1
TIME	0.	0.	0.	4.4	68.2	124.7	57.4	13.1	0.	0.	267.9

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 75											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20					1		2				3
-10											
10											
20											
30											
40											
SUM					1		2				3
TIME	0.	0.	0.	18.5	115.7	181.4	123.9	53.8	0.	0.	493.3

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 80											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20					1		1				2
-10											
10											
20											
30											
40											
SUM					1		1				2
TIME	0.	0.	0.	27.3	192.5	224.8	95.8	17.0	0.	0.	557.8

TABLE XIX - Concluded

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 95											
LFSS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20							1				1
-10											
10											
20											
30											
40											
SUM							1				1
TIME	0.	0.	0.	0.4	71.2	162.6	203.6	22.2	0.	0.	460.1

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 115											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20											
-10											
10								1			1
20											
30											
40											
SUM								1			1
TIME	0.	0.	0.	0.	0.	0.	1.6	0.6	0.9	0.	3.1

TABLE XX. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS  
BY ROTOR RPM (MISSION SEGMENT 4), SAMPLE I

COLL. STEADY VS COLLECTIVE PEAKS BY RPM LESS											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20											
-10											
10						1					1
20											
30											
40											
SUM						1					1
TIME	0.	0.	0.	0.1	13.8	15.2	12.2	0.	0.	0.	41.3

COLL. STEADY VS COLLECTIVE PEAKS BY RPM 180											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30							5				5
-20					2	9	7				18
-10											
10				1	2	4					7
20						2	1				3
30											
40											
SUM				1	4	15	13				33
TIME	0.	0.	0.	25.9	413.9	547.3	323.9	48.5	0.	0.	1359.5

COLL. STEADY VS COLLECTIVE PEAKS BY RPM 185											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30				1		6	8	4			19
-20					2	23	20	6			51
-10											
10					3	25	4	2			34
20				1	1	3					5
30						1					1
40											
SUM				2	6	58	32	12			110
TIME	0.	0.	0.	86.6	890.1	1055.1	848.3	200.6	0.3	0.	3121.0

TABLE XX - Concluded

COLL. STEADY VS COLLECTIVE PEAKS BY RPM 190											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LFSS											
-40											
-30						1	1	1			3
-20				1		5	10	1			17
-10											
10					1	4	3				8
20											
30											
40											
SUM				1	1	10	14	2			28
TIME	0.	0.	0.	9.5	230.0	288.8	271.3	61.3	7.0	0.	867.8

COLL. STEADY VS COLLECTIVE PEAKS BY RPM 195											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						1	1				2
-10											
10											
20											
30											
40											
SUM						1	1				2
TIME	0.	0.	0.	0.1	0.4	11.4	7.6	0.	0.	0.	19.5

COLL. STEADY VS COLLECTIVE PEAKS BY RPM SUM											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30				1		7	14	5			27
-20				1	4	38	38	7			88
-10											
10				1	6	34	7	2			50
20				1	1	5	1				8
30						1					1
40											
SUM				4	11	85	60	14			174
TIME	0.	0.	0.	122.1	1548.2	1957.8	1463.2	310.5	7.3	0.	5409.1

TABLE XXI. AIRSPEED ACCELERATION VERSUS COLLECTIVE  
PEAKS BY MISSION SEGMENT, SAMPLE I

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. ASCENT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LFSS						1						1
-40						2						2
-30						9						9
-20						58	2					60
-10												
10					2	378	5					385
20						188	4					192
30						1						1
40												
SUM					2	617	11					650

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. MANUVR												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LFSS												
-40												
-30						2						2
-20						1						1
-10												
10						2						2
20						1						1
30												
40												
SUM						6						6

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. DESCNT												
	LFSS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LFSS				1	8	24						33
-40				1	31	165						197
-30					30	327						357
-20					4	784						288
-10												
10						251						251
20						116						116
30					1	12						13
40												
SUM				2	74	1179						1255

TABLE XXII. ROTOR RPM VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE I

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT								
	LESS	180	185	190	195	200	205	SUM
LESS			1					1
-40		1	1					2
-30		4	4	1				9
-20		12	34	13	1			60
-10								
10	4	95	235	50	1			385
20	1	38	121	32				192
30		1						1
40								
SUM	5	151	396	96	2			650
TIME	14.6	731.6	1871.3	556.8	15.2	0.	0.	3189.6

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT MANUVR								
	LESS	180	185	190	195	200	205	SUM
LESS								
-40								
-30		2						2
-20			1					1
-10								
10		1	1					2
20		1						1
30								
40								
SUM		4	2					6
TIME	0.	14.1	41.5	0.6	0.	0.	0.	56.1

TABLE XXII - Concluded

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT DESCNT								
LESS	LESS	180	185	190	195	200	205	SUM
		8	17	7	1			33
-40	1	48	123	25				197
-30	2	106	187	58	2			357
-20		68	170	46	4			288
-10								
10		52	150	41	1			251
20	1	27	72	14	2			116
30		4	6	2				13
40								
SUM	5	320	725	194	11			1255
TIME	25.3	950.6	2024.4	547.2	6.6	0.	0.	3554.2

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT STEADY								
LESS	LESS	180	185	190	195	200	205	SUM
-40								
-30		5	19	3				27
-20		18	51	17	2			88
-10								
10	1	7	34	8				50
20		3	5					8
30			1					1
40								
SUM	1	33	110	28	2			174
TIME	41.3	1359.5	3121.0	867.8	19.5	0.	0.	5409.0



TABLE XXIII. AIRSPEED VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE I

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS	1															1
-40	2															2
-30	6															6
-20	7	2		1	3	1	1	4	2	1						9
-10																0
10	30	87	42	39	28	27	30	17	9	4	3					385
20	86	96	23	16	12	7	4	4	3	1						492
30									1							1
40																0
SUM	229	192	70	58	43	35	35	25	15	6	3					650
TIME	510.8	715.2	413.0	358.4	306.8	253.0	221.4	161.7	118.0	67.6	22.2	3.2	0.2	0.	0.	3189.6

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40																2
-30			1			1										1
-20								1								
-10																2
10							2									1
20										1						
30																0
40																0
SUM			1			1	2	1		1						6
TIME	0.	0.1	0.1	0.3	1.6	3.7	9.3	15.2	14.7	7.6	3.1	0.3	0.1	0.	0.	56.1

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS	2															33
-40	1															1
-30	40															157
-20	36	150	40	30	30	25	10	13	4	3	1	1				357
-10	42	37	31	24	16	24	14	14	12	11	2	3	1	1		288
10																
20	131	70	9	15	14	21	8	4	11	11	7	1				251
30	36	6	2	7	1	1	1		1	2			1			116
40			2	1			2									13
SUM	314	323	112	112	46	101	65	48	44	31	12	6	2	1		1255
TIME	494.0	676.1	245.6	221.7	376.9	204.7	412.6	351.4	357.4	227.5	102.5	32.7	9.7	1.0	0.	3356.2

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40																27
-30																88
-20										1						
-10																
10	40		1											1		50
20																3
30																1
40																0
SUM	144		1				3	2		1				1		174
TIME	573.6	221.9	247.9	447.7	490.9	493.3	557.8	717.6	933.7	460.1	169.6	37.0	42.2	3.1	0.	3409.1

TABLE XXIV. GUST  $n_z$  PEAKS FOR  $\mu$  VERSUS  $n_z$  BY MISSION  
SEGMENT, ALTITUDE, AND  $C_T/\sigma$ , SAMPLE I

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 2000, CT/S LESS									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2				1					1
0.8									
0.7					1				1
0.6									
SLP				1	1				2
TIME	5.3	2.8	4.3	10.3	13.8	4.9	0.	0.	41.3

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 2000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3						1			1
1.2				1	10	7			18
0.8									
0.7					6	9			15
0.6					1				1
0.5									
SLP				1	17	17			35
TIME	53.2	37.5	64.8	267.4	526.4	261.1	4.7	0.	1237.1

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 2000, CT/S 0.05									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2				1	1				2
0.8									
0.7						1			1
0.6									
SLP				1	1	1			3
TIME	67.7	36.2	66.3	511.1	530.2	9.7	0.6	0.	1221.9

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 2000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3						1			1
1.2				2	11	7			21
0.8									
0.7					7	10			17
0.6					1				1
0.5									
SLP				2	15	18			40
TIME	126.1	76.5	135.5	789.5	1073.5	255.6	5.4	0.	2502.1

TABLE XXIV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE										5000, CT/S	0.06
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM			
1.3											
1.2					1			1			
0.8											
0.7					3			3			
0.6											
SLP					4			4			
TIME	0.	0.	0.	15.7	113.4	116.1	0.7	0.	245.6		

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE										5000	
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM			
1.3											
1.2					1			1			
0.8											
0.7					3			3			
0.6											
SLP					4			4			
TIME	0.	0.	0.6	37.2	171.3	120.6	0.7	0.	330.3		

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT											
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM			
1.4											
1.3					1			1			
1.2			3	11	8			22			
0.8											
0.7				7	13			20			
0.6				1				1			
0.5											
SLP			3	19	22			44			
TIME	233.5	117.8	189.2	911.3	1311.7	420.0	6.0	0.	3189.6		

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE										2000, CT/S	0.06
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM			
1.3											
1.2					1			1			
0.8											
0.7					1			1			
0.6											
SLP					2			2			
TIME	0.	0.	0.	0.2	8.0	26.8	0.7	0.	35.7		

TABLE XXIV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 2000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.3									
1.2						1			1
0.8									
0.7						1			1
0.6									
SLP						2			2
TIME	C.	0.	C.	0.2	0.0	26.8	C.7	0.	35.7

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 5000, CT/S C.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.3									
1.2						1			1
0.8									
0.7						4			4
0.6						1			1
C.5									
SLP						6			6
TIME	C.	0.	C.	0.	1.0	18.2	C.1	0.	19.3

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 9000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.3									
1.2						1			1
C.8									
C.7						4			4
C.6						1			1
C.5									
SLP						6			6
TIME	C.	0.	C.	0.	2.0	18.3	C.1	0.	20.4

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.3									
1.2						2			2
C.8									
0.7						5			5
C.6						1			1
C.5									
SLP						8			8
TIME	C.	0.	C.	0.2	10.1	45.1	C.8	0.	56.1

TABLE XXIV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000, CT/S LESS									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3					1				1
1.2					3	4			7
0.8									
0.7						2			2
0.6									
SLP					4	6			10
TIME	5.8	6.4	7.0	18.9	44.6	47.9	0.3	0.	130.9

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3						1			1
1.2					9	11	1		21
0.8									
0.7				1	9	12	1		15
0.6					1	2			3
0.5									
SUM				1	15	26	2		44
TIME	42.7	42.9	74.4	147.1	432.6	790.3	46.1	0.	1576.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000, CT/S 0.05									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1	1			2
0.8									
SLP					1	1			2
TIME	17.6	22.6	54.5	277.0	541.3	41.0	0.3	0.	954.3

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3					1	1			2
1.2					13	16	1		30
0.8									
0.7				1	9	14	1		25
0.6					1	2			3
0.5									
SLP				1	20	33	2		56
TIME	66.1	71.8	135.8	443.1	1015.6	875.3	46.7	0.	2662.5

TABLE XXIV - Continued

GUST NZ PEAKS FOR		ML	VS	NZ	BY MISSION SEGMENT DESCNT,				ALTITUDE	5000, CT/S	C.06
LESS	0.00	C.05	C.10	0.15	C.20	C.25	C.30	SLP			
1.3											
1.2					1	1			2		
C.8											
0.7						2			2		
0.6											
SLP					1	3			4		
TIME	C.	0.	C.	7.1	86.2	203.1	12.6	0.	309.0		

GUST NZ PEAKS FOR		ML	VS	NZ	BY MISSION SEGMENT DESCNT,				ALTITUDE	5000, CT/S	C.09
LESS	0.00	C.05	C.10	0.15	C.20	C.25	C.30	SLP			
1.3											
1.2					1				1		
0.8											
SLP					1				1		
TIME	C.	0.	C.	10.4	69.7	10.6	C.2	0.	91.0		

GUST NZ PEAKS FOR		MU	VS	NZ	BY MISSION SEGMENT DESCNT,				ALTITUDE	5000
LESS	0.00	0.05	C.10	0.15	C.20	0.25	C.30	SLP		
1.3										
1.2					2	1			3	
C.8										
0.7						2			2	
C.6										
SLP					2	3			5	
TIME	C.	0.	C.	17.5	156.3	214.1	12.8	0.	400.7	

GUST NZ PEAKS FOR		MU	VS	NZ	BY MISSION SEGMENT DESCNT				
LESS	0.00	C.05	C.10	0.15	C.20	0.25	C.30	SLP	
1.4									
1.3					1	1			2
1.2					15	17	1		33
0.8									
0.7				1	5	16	1		23
C.6					1	2			3
C.5									
SLP				1	22	36	2		61
TIME	143.4	131.0	242.2	596.6	1263.6	1116.9	60.6	0.	3554.2

TABLE XXIV - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE										2000, C7/S	C.C6
LESS	C.CC	C.C5	C.1C	C.15	C.2C	C.25	C.30	SLP			
1.3											
1.2				2	9			11			
0.8											
0.7				2	5			11			
0.6					1			1			
0.5											
SLP				4	15			23			
TIME	126.1	84.3	21.2	53.2	283.C	1335.2	38.9	0.	1541.9		

GLST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE										2000, C7/S	0.C9
LESS	C.CC	C.C5	C.1C	C.15	C.20	C.25	C.30	SLP			
1.3											
1.2				1				1			
0.8											
SLP				1				1			
TIME	21.8	10.8	14.2	230.C	978.6	33.8	1.3	0.	1290.8		

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE										2000	
LESS	C.CC	C.C5	C.1C	C.15	C.20	C.25	C.30	SLP			
1.3											
1.2				3	9			12			
0.8											
0.7				2	9			11			
0.6					1			1			
0.5											
SLP				5	15			24			
TIME	162.1	99.8	36.1	283.6	1268.C	1356.9	40.2	0.	3286.6		

GLST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE										5000, C7/S	0.C6
LESS	C.CC	C.C5	C.1C	C.15	C.20	C.25	C.30	SLP			
1.4											
1.3					1			1			
1.2					12	1		13			
0.8											
0.7				1	16	2		15			
0.6				1	2			3			
0.5											
SLP				2	31	3		36			
TIME	C.	0.	C.	11.7	322.8	1007.5	63.8	0.	1405.6		

TABLE XXIV - Concluded

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 5000, CT/S C.CS									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUP
1.3									
1.2					1				1
0.8									
0.7					1				1
0.6									
SUP					2				2
TIME	C.	0.	C.	45.6	353.3	6.6	C.	0.	405.7

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 5000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUP
1.4									
1.3						1			1
1.2					1	12	1		14
0.8									
0.7					2	16	2		20
0.6					1	2			3
0.5									
SUP					4	31	3		38
TIME	C.	0.	C.	57.6	682.8	1015.8	63.8	0.	1820.0

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUP
1.4									
1.3						1			1
1.2					4	21	1		26
0.8									
0.7					4	25	2		31
0.6					1	3			4
0.5									
SUP					9	50	3		62
TIME	366.2	172.9	39.1	341.8	1555.0	2414.4	104.0	0.	5393.4

GUST NZ PEAKS FOR MU VS NZ									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUP
1.4									
1.3					1	3			4
1.2				3	30	48	2		83
0.8									
0.7				1	14	59	3		79
0.6					3	6			9
0.5									
SUP				4	50	116	5		175
TIME	754.6	426.1	470.5	1890.0	4540.3	3996.3	171.4	0.	12209.1



TABLE XXV. GUST  $n_z$  PEAKS FOR AIRSPEED VERSUS  $n_z$  BY WEIGHT, ALTITUDE, AND MISSION SEGMENT, SAMPLE I

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2		1														1
C.8																
C.7						1		1								2
O.6																
SLP		1				1		1								3
TIME	5.3	7.7	4.1	3.9	2.3	7.6	5.2	8.8	8.6	4.3	0.8	0.	C.	0.	C.	58.7

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3							1									1
1.2					1	1	1	1	1	2						7
C.8																
C.7								1	2		1					4
O.6																
SLP					1	1	2	2	3	2	1					12
TIME	11.3	10.8	4.5	4.2	7.3	12.7	16.3	22.0	27.7	13.6	8.8	5.1	1.6	C.3	0.	145.7

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3							1									1
1.2		1			1	1	1	1	1	2						8
C.8																
C.7						1		2	2		1					6
O.6																
SLP		1			1	2	2	3	3	2	1					15
TIME	25.0	18.5	8.7	8.1	10.6	22.8	25.5	42.5	58.5	27.1	14.7	7.9	2.1	C.3	C.	272.3

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 5000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8																
C.7								1								1
O.6																
SLP								1								1
TIME	C.	C.1	C.5	C.4	C.2	C.1	1.8	1.7	0.9	2.7	0.5	C.	C.	0.	C.	8.9

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8																
C.7								1								1
C.6																
SLP								1								1
TIME	C.	0.1	C.5	0.4	C.5	C.9	4.8	14.4	13.6	6.6	6.3	2.7	1.	C.1	C.	52.7

TABLE XXV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3							1									1
1.2		1			1	1	1	1	1	2						8
C.8																
C.7						1		3	2		1					7
C.6																
C.5																
SLP		1			1	2	2	4	3	2	1					16
TIME	49.1	24.5	10.5	10.3	11.9	24.5	31.2	57.4	72.8	34.2	21.0	10.6	3.9	0.4	0.	362.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3									1							1
1.2					1	1			3							5
C.8																
C.7			2			1	2	1	1	2						9
C.6							1									1
C.5																
SLP			2		1	2	3	1	5	2						16
TIME	39.7	58.0	25.2	28.6	38.8	32.6	35.1	28.3	28.0	13.3	3.7	0.	C.	0.	C.	331.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2										1						1
C.8																
SLP										1						1
TIME	C.	C.	C.	C.	C.	C.	2.6	3.1	2.9	1.6	1.4	C.2	C.	C.	C.	11.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						2	3		3	3						11
C.8																
C.7		1			1	1	3	2	1	1	1					11
C.6					1		1		1							3
C.5																
SLP		1			2	3	7	2	5	4	1					29
TIME	55.3	42.9	21.2	25.2	36.8	53.5	77.1	96.0	113.4	63.0	33.4	6.4	3.1	C.2	C.	627.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1			3	2							6
C.8																
C.7								1	1	2						4
C.6																
SLP					1			4	3	2						10
TIME	74.6	0.5	C.	1.2	7.5	22.5	47.8	89.6	150.0	89.0	13.5	C.7	C.	0.	C.	497.2

TABLE XXV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4									1							1
1.3									8	4						12
1.2					2	3	3	3								23
C.8																
C.7		1	2		1	2	5	4	3	5	1					24
C.6					1		2		1							4
C.5																
SLP		1	2		4	5	10	7	13	9	1					52
TIME	167.7	101.4	46.4	59.0	83.1	108.5	166.7	217.0	294.2	166.8	52.4	7.3	3.1	0.2	0.	1469.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSILE SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8									1							1
C.7																
C.6																
SLP									1							1
TIME	C.	1.6	2.2	6.8	7.2	9.7	19.3	15.5	9.0	2.8	0.2	C.	C.	0.	C.	74.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSILE SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8									1							1
C.7																
C.6									1							1
SLP																
TIME	C.	0.	C.	0.	C.	C.	2.4	2.4	0.1	0.6	0.4	C.	C.1	C.	C.	6.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSILE SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						1										1
C.8																
SLP						1										1
TIME	C.	2.4	4.4	2.5	3.9	9.4	16.5	26.8	22.4	17.8	4.1	1.7	C.	0.	C.	112.5

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSILE SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									3	1						4
C.8																
C.7									1	2	1					4
C.6									1							1
C.5																
SLP									2	5	2					9
TIME	C.	4.7	6.0	13.2	20.0	33.8	65.6	66.0	89.7	35.8	20.4	C.1	C.	0.	C.	355.2

TABLE XXV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 23000, ALTITUDE 9000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3						1			3	1						5
1.2																
0.8								3	2	1						6
0.7								1								1
0.6																
0.5						1		4	5	2						12
SLP																
TIME	C.	8.7	12.6	22.9	31.1	52.9	103.8	110.7	121.3	57.0	25.2	1.8	C.1	0.	C.	548.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3									1							1
1.2					2	4	3	3	11	5						28
C.8																
C.7		1	2		1	2	5	7	5	6	1					30
C.6					1		2	1	1							5
0.5																
SLP		1	2		4	6	10	11	18	11	1					64
TIME	299.5	148.8	69.8	86.1	122.5	168.0	275.3	330.5	416.2	224.3	77.7	9.2	3.2	0.2	C.	2231.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2		1		1	3		1		1	1						8
C.8																
0.7								2	1							3
C.6																
SLP		1		1	3		1	2	2	1						11
TIME	66.4	93.7	44.2	52.0	56.6	53.6	49.6	47.3	27.5	18.5	7.6	1.7	C.	0.	C.	518.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
0.7								1								1
0.6																
SLP								1								1
TIME	C.	0.1	C.1	0.3	1.0	1.4	1.5	4.5	6.7	3.2	0.3	C.1	C.	0.	C.	19.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3											1					1
1.2					1		1		1	3		1				7
0.8																
0.7							1		1	2	1					5
0.6																
SLP					1		2		2	5	2	1				13
TIME	67.2	52.3	26.0	24.0	37.6	55.8	78.8	102.2	99.7	73.1	29.9	10.3	1.8	0.3	0.	654.1

TABLE XXV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3								1	1	2						4
1.2																
C.8																
0.7						1	1		3	1						6
0.6										1						1
0.5																
SUP						1	1	1	4	4						11
TIME	98.6	27.6	14.3	3.1	9.8	40.0	104.9	174.9	208.1	95.6	45.7	1.2	C.	C.	C.	823.9

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3											1					1
1.2		1		1	4		2	1	3	6		1				19
0.8																
0.7						1	2	3	5	3	1					15
0.6										1						1
0.5																
SLP		1		1	4	1	4	4	8	10	2	1				36
TIME	229.4	173.7	84.6	79.4	105.0	150.9	234.7	328.9	342.0	190.4	83.5	13.2	1.8	0.3	C.	2018.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSICA SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									1							1
0.8																
SUP									1							1
TIME	C.	3.4	3.0	5.6	10.9	12.4	15.2	17.9	11.6	7.0	1.4	C.1	C.2	C.	C.	92.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, PISSICA SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8																
0.7								1		1	1					3
0.6							1									1
C.5																
SLP							1	1		1	1					4
TIME	C.	0.	C.	0.	C.	C.	1.0	3.7	2.1	1.4	1.0	C.	C.	C.	C.	5.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 9000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2																
C.8										1						1
0.7								1		1						2
C.6																
SUP								1		2						3
TIME	C.	0.2	1.3	3.2	7.4	11.3	13.5	21.3	28.5	14.4	11.0	4.7	1.8	C.0	C.	119.1

TABLE XXV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSICA SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3									1							1
1.2								1	3	2	2					8
0.8																
0.7							1	1	3	1						6
0.6																
SLP							1	2	7	3	2					15
TIME	C.	1.3	1.1	5.9	15.2	33.7	97.7	170.3	228.8	70.6	21.5	7.2	12.5	1.7	C.	667.6

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3									1							1
1.2								1	4	3	2					10
0.8																
0.7							1	3	3	3	1					11
0.6							1									1
0.5																
SLP							2	4	8	6	3					23
TIME	C.	5.0	5.3	14.7	33.5	57.5	131.8	213.2	270.5	93.5	34.5	12.0	14.6	1.8	C.	888.6

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3									1		1					2
1.2		1		1	4		2	2	7	9	2	1				29
0.8																
0.7						1	3	6	8	6	2					26
0.6							1			1						2
0.5																
SLP		1		1	4	1	6	8	16	16	5	1				59
TIME	448.4	220.0	106.7	103.2	148.5	219.4	374.8	546.4	615.7	284.4	118.9	25.2	16.4	2.1	C.	3230.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSICA SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3							3	1								4
1.2																
0.8																
0.7					1	1										2
0.6																
SLP					1	1	3	1								6
TIME	77.6	53.4	31.6	28.4	29.6	40.1	35.7	28.5	15.5	7.4	4.4	0.6	C.	C.	C.	308.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSICA SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1	1		1								3
0.8																
0.7										1						1
0.6																
SLP					1	1		1		1						4
TIME	16.2	15.1	7.6	12.2	13.5	14.0	22.4	30.0	32.9	23.7	6.9	2.2	C.	C.	C.	196.6

TABLE XXV - Continued

GUST AZ PEAKS FOR VELOCITY VS AZ BY HEIGHT 27000, ALTITUDE 2000, PHYSICA SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3						1										1
1.2																
C.8						1										1
C.7																
C.6																
SLP						2										2
TIME	20.3	11.5	5.2	5.8	14.0	27.5	54.5	108.0	123.3	93.7	40.7	12.4	C.1	0.	C.	522.2

GUST AZ PEAKS FOR VELOCITY VS AZ BY HEIGHT 27000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1	2	3	2								8
C.8																
C.7					1	2				1						4
C.6																
SLP					2	4	3	2		1						12
TIME	70.3	80.0	48.4	46.4	58.0	82.7	114.5	166.7	171.7	124.8	52.0	15.1	C.1	C.	0.	1030.7

GUST AZ PEAKS FOR VELOCITY VS AZ BY HEIGHT 27000, ALTITUDE 5000, PHYSICA SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8																
C.7									1							1
C.6																
SLP									1							1
TIME	C.	4.5	3.1	2.4	3.2	5.1	12.1	7.3	13.2	8.3	2.3	0.2	C.	0.	C.	62.0

GUST AZ PEAKS FOR VELOCITY VS AZ BY HEIGHT 27000, ALTITUDE 5000, PHYSICA SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2										1						1
C.8																
C.7										1						1
SLP																
TIME	C.	0.	C.	0.	0.5	C.3	0.1	0.5	0.8	C.5	0.	C.	0.	C.	0.	2.6

GUST AZ PEAKS FOR VELOCITY VS AZ BY HEIGHT 27000, ALTITUDE 5000, PHYSICA SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									1							1
C.8																
C.7							1		1	3	2					7
C.6							1			1						2
C.5																
SLP							2		2	4	2					10
TIME	C.	0.	C.	1.5	2.4	7.4	35.1	52.5	65.5	53.0	12.0	8.5	27.5	1.4	C.	276.0

TABLE XXV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3									1	1						2
1.2																
0.8																
C.7							1		2	3	2					8
0.6							1			1						2
0.5																
SLP							2		3	5	2					12
TYPE	C.	5.0	4.1	7.4	9.4	16.1	61.0	68.9	89.3	74.4	17.6	10.2	28.5	1.4	0.	393.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1	2	3	2	1	1						10
0.8																
C.7					1	2	1		2	4	2					12
0.6							1			1						2
C.5																
SLP					2	4	5	2	3	6	2					24
TYPE	160.7	119.1	60.1	64.2	74.3	103.0	177.9	237.3	264.5	200.4	70.3	25.4	28.6	1.4	0.	1583.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
0.8																
SLP					1											1
TIME	9.1	6.5	6.1	5.3	4.9	3.0	3.6	0.9	0.1	0.	0.	0.	0.	0.	0.	39.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 29000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
C.8																
SLP					1											1
TYPE	22.9	9.2	7.4	7.0	9.2	7.2	8.9	9.3	21.6	7.5	0.	0.	0.	0.	0.	110.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 29000, ALTITUDE 5000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
C.7												2				2
0.6																
SLP												2				2
TYPE	C.	0.	C.	1.5	6.6	10.2	34.3	20.1	8.7	1.8	1.5	1.2	C.	0.	C.	85.8



TABLE XXV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000, ALTITUDE 9000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7												2				2
0.6																
SLP												2				2
TIME	C.	0.9	0.9	3.6	9.2	11.2	35.2	22.6	10.5	2.2	1.9	1.4	C.	C.	0.	59.6

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
C.8																
0.7												2				2
C.6																
SLP					1							2				3
TIME	38.2	14.5	8.7	11.3	18.5	15.1	44.0	32.1	32.1	9.8	2.5	1.4	C.	C.	C.	232.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2		1														1
C.8																
0.7									1							1
C.6																
SLP		1							1							2
TIME	11.3	31.0	31.3	37.1	15.3	12.6	3.7	0.8	0.6	2.1	0.5	C.6	C.	C.	0.	191.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2		1														1
C.8																
0.7									1							1
0.6																
SLP		1							1							2
TIME	32.4	81.5	104.4	141.6	92.2	98.6	26.1	4.3	1.9	4.2	4.4	1.6	0.	C.	C.	553.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2		1														1
0.8																
0.7									1							1
0.6																
SLP		1							1							2
TIME	62.3	97.2	111.4	155.3	108.5	73.7	28.5	6.8	6.0	6.1	5.4	1.6	C.	0.	C.	663.0

TABLE XXV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 30000, ALTITUDE 2000, PHYSICAL SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3								1								1
1.2																
C.0								1								1
SLP																
TYPE	16.8	47.9	33.0	38.0	29.1	23.5	14.6	6.0	1.7	0.5	0.	0.	C.	C.	C.	211.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 30000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3								1								1
1.2																
C.0								1								1
SLP																
TYPE	96.6	194.0	132.1	151.0	118.0	57.0	34.2	6.3	2.4	0.5	0.	C.	C.	C.	C.	757.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 30000, ALTITUDE 5000, PHYSICAL SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3					1											1
1.2																
C.0					1											1
SLP																
TYPE	C.	8.8	3.5	32.5	23.6	16.3	3.0	0.7	C.	0.	0.	0.	C.	0.	C.	88.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 30000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3					1											1
1.2																
C.0					1											1
SLP																
TYPE	C.	16.1	10.8	38.3	29.3	15.4	5.4	1.5	0.4	C.	0.	C.	C.	C.	C.	121.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 30000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3					1			1								2
1.2																
C.0					1			1								2
SLP																
TYPE	94.5	193.0	150.4	162.5	150.0	117.8	39.9	9.8	2.8	C.5	C.	C.	C.	0.	C.	951.6

TABLE XXV - Continued

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 2000, MISSION SEGMENT DESCNT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
C.8																
SLP					1											1
TIME	12.3	45.7	24.2	24.3	27.6	20.4	10.1	3.2	0.7	0.4	0.	C.	C.	C.	C.	168.9

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 2000, MISSION SEGMENT STEADY															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
C.8																
SLP					1											1
TIME	2.8	24.4	25.6	53.1	52.6	38.5	19.7	2.7	2.1	0.	C.	C.	C.	C.	C.	224.5

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 2000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1	1										2
C.8																
SLP					1	1										2
TIME	51.4	147.4	96.8	121.0	107.0	73.3	32.8	6.2	3.0	0.4	0.	C.	C.	C.	0.	639.4

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 5000, MISSION SEGMENT DESCNT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
C.8																
SLP					1											1
TIME	C.	0.7	4.8	5.0	6.3	C.7	C.5	C.1	C.2	0.	0.	C.	C.	0.	C.	18.5

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 5000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
C.8																
SLP					1											1
TIME	C.	7.4	27.3	50.6	37.6	18.6	3.4	0.1	0.2	0.	C.	0.	C.	C.	C.	141.2

TABLE XXV - Continued

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 39000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2				1	2											3
C.6																
SLP				1	2											3
TIME	94.1	171.0	123.7	173.7	146.1	53.9	37.0	6.4	3.2	0.4	0.	C.	C.	0.	C.	849.5

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 40000, ALTITUDE 2000, PHYSICAL SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2			1													1
C.6																
SLP			1													1
TIME	90.6	156.9	83.0	91.3	27.0	15.5	10.0	1.0	0.1	0.	0.	C.	C.	0.	C.	355.5

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 40000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2			1													1
C.6																
SLP			1													1
TIME	87.1	257.3	149.2	154.4	152.1	72.8	37.3	5.6	3.1	1.0	0.5	0.	C.	0.	C.	920.4

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 40000, ALTITUDE 5000, PHYSICAL SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7						1										1
C.6																
SLP						1										1
TIME	C.	8.2	12.2	36.7	40.1	26.6	13.2	0.2	C.	0.	0.	0.	C.	C.	C.	137.3

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 40000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7						1										1
C.6																
SLP						1										1
TIME	C.6	12.0	18.0	47.0	45.7	35.4	17.2	1.8	0.2	0.	0.	C.	C.	C.	C.	180.9

TABLE XXV - Concluded

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2			1													1
C.8																
0.7						1										1
C.6																
SUP			1			1										2
TIME	139.9	292.4	170.0	208.7	205.2	109.8	95.8	7.7	3.3	1.0	0.5	0.	0.	0.	0.	1194.3

GUST NZ PEAKS FOR VELOCITY VS NZ																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3							1		2		1					4
1.2		3	1	2	12	7	9	9	20	17	2	1				83
C.8																
0.7		1	2		2	7	9	16	18	16	6	2				79
0.6					1		4	1	1	2						9
0.5																
SLP		4	3	2	15	14	23	26	41	35	9	3				175
TIME	1948.2	1493.2	927.6	1133.1	1121.3	1058.7	1108.1	1246.0	1423.9	762.9	296.5	73.2	92.2	4.1	0.	12209.1

TABLE XXVI. MANEUVER  $n_z$  PEAKS FOR  $\mu$  VERSUS  $n_z$  BY MISSION SEGMENT, ALTITUDE, AND  $C_T/\sigma$ , SAMPLE I

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	LESS, CT/S	LESS
	LESS	C.00	C.05	C.10	0.15	C.20	C.25	C.30	SLP		
1.3											
1.2	1			1						2	
0.8											
SLP	1			1						2	
TIME	1.2	0.	C.2	0.2	C.	C.	C.	0.	1.5		

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE LESS, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.3									
1.2	2								2
0.8									
SLP	2								2
TIME	6.2	2.0	1.4	2.0	2.4	0.	0.	0.	14.0

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP	
1.3										
1.2	3			1						4
0.8										
SLP	3			1						4
TIME	15.4	2.6	3.6	4.5	4.7	0.	0.	0.	30.8	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT ASCENT,	ALTITUDE	1000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP	
1.4										
1.3		1								1
1.2	2	1			1					4
0.8										
SLP	2	2			1					5
TIME	5.7	3.0	6.4	2.7	1.4	0.	0.	0.	19.1	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT ASCENT,	ALTITUDE	1000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.3									
1.2	11	7	1	2	2	1			24
0.8									
SLP	11	7	1	2	2	1			24
TIME	41.4	18.7	26.3	41.6	30.1	2.8	0.	0.	160.7

TABLE XXVI - Continued

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT ASCENT,	ALTITUDE	1000, CT/S	O.C5
	LESS	O.C0	O.C5	O.10	O.15	O.20	O.25	O.30	SUM
1.3									
1.2	1								1
0.8									
SLP	1								1
TIME	44.9	17.1	16.9	35.2	30.2	1.0	0.	0.	146.5

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	1000
	LESS	C.OO	C.O5	C.10	C.15	C.20	C.25	C.30	SUM	
1.4										
1.3		1							1	
1.2	14	8	1	3	2	1			29	
0.8										
SLP	14	9	1	3	2	1			30	
TIME	92.0	38.8	49.6	80.1	62.2	3.8	C.	0.	326.4	

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT ASCENT,	ALTITUDE	2000, CT/S	LESS
	LESS	O.C0	O.C5	O.10	O.15	O.20	O.25	O.30	SUM
1.5									
1.4	1								1
1.3	1								1
1.2	5	3			4				12
0.8									
0.7	1								1
0.6									
SUM	8	3			4				15
TIME	5.3	2.8	4.3	10.3	13.8	4.9	0.	0.	41.3

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT ASCENT,	ALTITUDE	2000, CT/S	O.C6
	LESS	O.C0	O.C5	O.10	O.15	O.20	O.25	O.30	SUM
1.5									
1.4				1					1
1.3		1	1	2		2			6
1.2	17	13	2	7	14	11			64
0.8									
0.7				1	7	5			13
0.6									
SLP	17	14	3	11	21	18			84
TIME	53.2	37.5	64.2	267.4	528.4	261.1	4.7	0.	1237.1

TABLE XXVI - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT ASCENT,	ALTITUDE	2000, CT/S	0.09
	LESS	C.00	0.05	C.10	0.15	0.20	C.25	C.30	SLM
1.5									
1.4					1				1
1.3									
1.2	3	1		1	1				6
0.8									
SLM	3	1		1	2				7
TIME	67.7	36.2	66.3	511.1	530.2	9.7	0.6	0.	1221.9

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT ASCENT,	ALTITUDE	2000	
	LESS	C.00	C.05	C.10	0.15	C.20	0.25	C.30	SLM
1.5									
1.4	1			1	1				3
1.3	1	1	1	2		2			7
1.2	25	17	2	8	19	11			82
0.8									
0.7	1			1	7	5			14
0.6									
SLP	28	18	2	12	27	18			106
TIME	126.1	76.5	135.5	789.5	1073.5	255.6	5.4	0.	2502.1

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT ASCENT,	ALTITUDE	5000, CT/S	C.06
	LESS	C.00	C.05	C.10	0.15	C.20	C.25	C.30	SLM
1.3									
1.2						3			3
0.8									
0.7					7	1			8
0.6						1			1
0.5									
SUM					7	5			12
TIME	C.	0.	C.	15.7	113.4	116.1	C.7	C.	245.8

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	5000
	LESS	0.00	0.05	C.10	0.15	0.20	0.25	0.30	SLM	
1.3										
1.2						3				3
0.8										
0.7					7	1				8
0.6						1				1
0.5										
SLM					7	5				12
TIME	C.	0.	C.6	37.2	171.3	120.6	C.7	0.	330.3	



TABLE XXVI - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT		
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.5									
1.4	1			1	1				3
1.3	1	2	1	2		2			8
1.2	42	25	3	12	21	15			118
C.8									
C.7	1			1	14	6			22
0.6						1			1
C.5									
SUP	45	27	4	16	36	24			152
TIME	233.5	117.8	189.2	911.3	1311.7	420.0	6.0	0.	3189.6

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000, CT/S	0.06
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP	
1.6										
1.5					1	1			2	
1.4					1				1	
1.3					1				1	
1.2					2	10			12	
C.8										
0.7						6			6	
0.6						1			1	
0.5										
SUP					5	18			23	
TIME	C.	0.	C.	0.2	8.0	26.8	C.7	0.	35.7	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.6									
1.5					1	1			2
1.4					1				1
1.3					1				1
1.2					2	10			12
C.8									
0.7						6			6
0.6						1			1
0.5									
SUP					5	18			23
TIME	C.	0.	C.	0.2	8.0	26.8	C.7	0.	35.7

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000, CT/S	C.06
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP	
1.3										
1.2						1			1	
0.8										
C.7						6	1		7	
C.6										
SUP						7	1		8	
TIME	C.	0.	C.	0.	1.0	18.2	C.1	0.	19.3	

TABLE XXVI - Continued

MANEUVER	NZ	PEAKS	FOR	ML	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	SCOO
	LESS	C.00		0.05	C.10	0.15	C.20	C.25	C.30	SLM	
1.3											
1.2							1			1	
C.8											
C.7							6	1		7	
C.6											
SLP							7	1		8	
TIME	C.	0.		C.	0.	2.0	18.3	C.1	0.	20.4	

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR	
	LESS	C.00		C.05	C.10	0.15	C.20	C.25	C.30	SLM
1.6										
1.5						1	1			2
1.4						1				1
1.3						1				1
1.2						2	11			13
C.8										
0.7							12	1		13
C.6							1			1
C.5										
SLP						5	25	1		31
TIME	C.	0.		C.	0.2	10.1	45.1	C.8	C.	56.1

MANEUVER	NZ	PEAKS	FOR	ML	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	LESS, CT/S	0.05
	LESS	0.00		0.05	C.10	C.15	C.20	C.25	C.30	SLM		
1.3												
1.2		1								1		
C.8												
SLP		1								1		
TIME	2.1	1.5		2.7	1.3	C.	C.	C.	0.	7.7		

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	LESS
	LESS	C.00		C.05	C.10	C.15	C.20	C.25	C.30	SLM	
1.3											
1.2		1								1	
C.8											
SLP		1								1	
TIME	5.1	4.5		11.7	8.7	4.5	1.6	C.	C.	40.5	

TABLE XXVI - Continued

MANEUVER	NZ PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITLCE	1000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2					1				1	
C.8										
SLP					1				1	
TIME	9.4	6.3	13.5	19.2	12.5	1.4	0.	0.	62.3	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITLCE	1000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.4										
1.3	2					1			3	
1.2	1	1	1	2	3	2			10	
C.8										
C.7				1					1	
C.6										
SLP	3	1	1	3	3	3			14	
TIME	39.5	32.2	46.5	65.5	56.1	20.4	1.0	0.	261.7	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITLCE	1000, CT/S	0.09
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2	1	4							5	
C.8										
SLM	1	4							5	
TIME	19.3	15.8	34.2	42.5	14.6	C.	C.	0.	126.5	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITLCE	1000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLP
1.4									
1.3	2					1			3
1.2	2	5	1	2	4	2			16
C.8									
C.7				1					1
C.6									
SLP	4	5	1	3	4	3			20
TIME	68.2	54.2	94.7	127.3	83.1	21.8	1.0	0.	450.4

TABLE XXVI - Continued

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	LESS
		LESS	C.CC	C.C5	C.1C	0.15	C.2C	C.25	C.3C	SUM	
1.5											
1.4						1				1	
1.3											
1.2	1				2	6	1			10	
C.8											
0.7						1	3			4	
C.6											
SLP	1				2	8	4			15	
TIME	5.8	6.4	7.0	18.5	44.6	47.9	C.3	C.		130.9	

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	C.C6
		LESS	C.CC	C.C5	C.1C	C.15	C.2C	0.25	C.3C	SUM	
1.5											
1.4						1				1	
1.3						4	3			7	
1.2	3	2			4	40	49	4		102	
C.8											
0.7	1					11	35	3		50	
C.6											
0.5								1		1	
0.4											
SLP	4	2			4	56	87	8		161	
TIME	42.7	42.9	74.4	147.1	432.6	750.3	46.1	C.		1576.1	

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	0.09
		LESS	C.CC	C.C5	C.1C	C.15	C.2C	C.25	C.3C	SUM	
1.3											
1.2					1	4				5	
C.8											
0.7	1					2				3	
C.6											
SLP	1				1	6				8	
TIME	17.6	22.6	54.5	277.0	541.3	41.0	C.3	C.		554.3	

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000	
		LESS	C.CC	C.C5	C.1C	C.15	C.2C	C.25	C.3C	SUM	
1.5											
1.4						2				2	
1.3						4	3			7	
1.2	4	2			7	50	50	4		117	
C.8											
0.7	2					14	38	3		57	
C.6											
C.5								1		1	
0.4											
SLP	6	2			7	70	91	8		184	
TIME	66.1	71.8	135.8	443.1	1019.6	879.3	46.7	C.		2662.5	

TABLE XXVI - Continued

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000, CT/S	0.06
	LESS	C.00	C.05	C.10	0.15	C.20	0.25	C.30	SUM			
1.3												
1.2					1	1			2			
C.8												
C.7						2	1		3			
0.6												
SLP					1	3	1		5			
TIME	C.	0.	C.	7.1	86.2	203.1	12.6	0.	309.0			

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000
	LESS	C.00	C.05	C.10	0.15	C.20	0.25	C.30	SUM		
1.3											
1.2					1	1			2		
C.8											
C.7						2	1		3		
0.6											
SLP					1	3	1		5		
TIME	C.	0.	C.	17.5	156.3	214.1	12.6	0.	400.7		

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT
	LESS	C.00	C.05	C.10	C.15	C.20	0.25	C.30	SUM
1.5									
1.4					2				2
1.3	2				4	4			10
1.2	6	8	1	5	55	53	4		136
0.8									
C.7	2			1	14	40	4		61
C.6									
C.5							1		1
0.4									
SLP	10	8	1	10	75	57	9		210
TIME	143.4	131.0	242.2	556.6	1263.6	1116.9	60.6	0.	3554.2

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	1000, CT/S	0.06
	LESS	0.00	C.05	C.10	0.15	C.20	0.25	C.30	SUM			
1.3												
1.2	1								1			
0.8												
0.7	2								2			
C.6	1								1			
C.5												
SLP	4								4			
TIME	143.5	54.8	2.6	0.1	1.2	1.6	C.	0.	203.8			

TABLE XXVI - Continued

MANEUVER	NZ	PEAKS	FCR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	1000
		LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLM	
1.3											
1.2		1								1	
C.8											
C.7		2								2	
C.6		1								1	
O.5											
SLP		4								4	
TIME	175.7	64.5	3.0	0.6	4.2	1.6	C.	C.		249.7	

MANEUVER	NZ	PEAKS	FCR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	2000, CT/S	LESS
		LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLM		
1.3												
1.2		1								1		
C.8												
C.7							1			1		
O.6												
SLP		1					1			2		
TIME	14.3	4.7	C.7	0.1	4.3	26.3	C.	O.		50.3		

MANEUVER	NZ	PEAKS	FCR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	2000, CT/S	0.06
		LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLM		
1.3												
1.2			2			3	19	1		25		
C.8												
O.7						1	16			17		
O.6							2			2		
C.5												
SLP			2			4	37	1		44		
TIME	126.1	84.3	21.2	53.2	283.0	1335.2	38.9	O.		1541.5		

MANEUVER	NZ	PEAKS	FCR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	2000, CT/S	0.09
		LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLM		
1.3												
1.2						1				1		
C.8												
SLP						1				1		
TIME	21.8	10.8	14.2	230.0	978.5	33.8	1.3	C.		1290.6		

TABLE XXVI - Continued

PANEL	VER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	2000
			LESS	0.00	C.05	C.10	C.15	C.20	C.25	C.30	SLM	
1.3												
1.2			1	2			4	19	1		27	
C.8												
C.7							1	17			18	
C.6								2			2	
C.5												
SLM			1	2			5	38	1		47	
TIME	162.1	59.8	36.1	283.6	1268.0	1356.9	40.2	0.	3286.6			

PANEL	VER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	5000, CT/S	0.06
			LESS	C.00	C.05	C.10	C.15	C.20	0.25	C.30	SLM		
1.3													
1.2								6	1		7		
C.8													
C.7							4	16	1		21		
C.6													
SLM							4	22	2		28		
TIME	C.	0.	C.	11.7	322.8	1007.5	63.8	0.	1405.9				

PANEL	VER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	5000
			LESS	C.00	0.05	C.10	0.15	C.20	0.25	C.30	SLM	
1.3												
1.2								6	1		7	
C.8												
C.7							4	16	1		21	
C.6												
SLM							4	22	2		28	
TIME	C.	0.	C.	57.6	682.8	1015.8	63.8	0.	1820.0			

PANELVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY										
	LESS	C.00	C.05	C.10	C.15	C.20	0.25	C.30	SLM	
1.3										
1.2	2	2			4	25	2		35	
C.8										
0.7	2				5	33	1		41	
C.6	1					2			3	
C.5										
SLM	5	2			5	60	3		75	
TIME	266.2	172.9	35.1	341.8	1555.0	2414.4	104.0	0.	5393.4	

TABLE XXVI - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HCIST,	ALTITUDE	LESS, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3	1								1
1.2	2								2
0.8									
SUP	3								3
TIME	0.2	0.	0.	0.	0.	0.	0.	0.	0.2

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HCIST,	ALTITUDE	LESS, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3	1								1
1.2	3	1							4
0.8									
SUP	4	1							5
TIME	0.6	0.1	0.	0.	0.	0.	0.	0.	0.7

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HCIST,	ALTITUDE	LESS, CT/S	0.09
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5									
1.4	1								1
1.3									
1.2	1								1
0.8									
SUP	2								2
TIME	0.2	0.	0.	0.	0.	0.	0.	0.	0.2

MANEUVER NZ PEAKS FOR		MU VS NZ BY MISSION SEGMENT HCIST, ALTITUDE							LESS
	LESS	C.00	C.05	C.10	0.15	C.20	0.25	C.30	SUM
1.5									
1.4	1								1
1.3	2								2
1.2	6	1							7
0.8									
SUM	9	1							10
TIME	1.0	C.1	C.	0.	C.	C.	C.	0.	1.1



TABLE XXVI - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MCIST,	ALTITUDE	ICCO, CT/S	LESS
	LESS	C.C0	0.05	0.10	0.15	0.20	0.25	0.30	SLM
1.6									1
1.5	1								2
1.4	2								1
1.3	1								5
1.2	5								1
C.8									1
C.7	1								10
0.6									10
SLM	10								0.9
TIME	C.9	0.	0.	0.	0.	0.	0.	0.	0.9

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MCIST,	ALTITUDE	ICCO, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SLM
1.4									5
1.3	8		1						9
1.2	9								7
C.8									24
0.7	7								1
C.6									25
SLM	24		1						4.4
TIME	2.8	0.5	C.C	0.	0.	0.	0.	0.	4.4

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MCIST,	ALTITUDE	ICCO, CT/S	0.06
	LESS	C.C0	0.05	0.10	0.15	0.20	0.25	0.30	SLM
2.0									1
1.8	1								1
1.7									1
1.6	1								1
1.5									1
1.4	1								7
1.3	5	2							11
1.2	7	4							1
C.8									1
0.7	1								22
0.6									1.7
SLM	16	6							1.7
TIME	1.1	C.6	0.	0.	0.	0.	0.	0.	1.7

TABLE XXVI - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HCIST,	ALTITUDE	1000
	LESS	C.00	C.05	C.10	C.15	C.20	C.25	C.30	SUM
2.0									
1.8	1								1
1.7									
1.6	1								1
1.5	1								1
1.4	3								3
1.3	14	2	1						17
1.2	21	4							25
C.8									
C.7	9								9
C.6									
SLP	50	6	1						57
TIME	5.8	1.1	C.C	0.	C.	C.	C.	C.	7.C

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HCIST,	ALTITUDE	2000, CT/S	LESS
	LESS	C.00	C.05	C.10	C.15	C.20	C.25	C.30	SUM
1.3									
1.2	2	1							3
C.8									
SLP	2	1							3
TIME	C.6	C.4	C.	0.	0.	C.	C.	0.	1.C

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HCIST,	ALTITUDE	2000, CT/S	0.C6
	LESS	C.00	C.05	C.10	C.15	C.20	C.25	C.30	SUM
1.4									
1.3	3	1							4
1.2	10	10							20
C.8									
C.7									
C.6									
C.5		1							1
C.4									
SLP	13	12							25
TIME	3.0	1.9	C.	0.	C.	C.	C.	0.	4.9

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HCIST,	ALTITUDE	2000, CT/S	0.C9
	LESS	C.00	C.05	C.10	C.15	C.20	C.25	C.30	SUM
1.6									
1.5	1								1
1.4									
1.3	2	3							5
1.2	7	9							16
C.8									
C.7	1	1							2
C.6									
SLP	11	13							24
TIME	1.1	C.7	C.	C.	C.	C.	C.	C.	1.8

TABLE XXVI - Concluded

MANEUVER	NZ PEAKS FOR		MU	VS	NZ	BY MISSION SEGMENT				HOIST,	ALTITUDE	ZCCO
	LESS	C.00	C.05		C.10	C.15	C.20	0.25	C.30		SUM	
1.6												
1.5	1										1	
1.4												
1.3	9	4									9	
1.2	19	20									39	
C.8												
C.7	1	1									2	
0.6												
C.5		1									1	
C.4												
SUM	26	26									52	
TIME	4.6	3.0	C.		0.	C.	C.	C.	0.		7.7	

MANEUVER	NZ PEAKS FOR		MU	VS	NZ	BY MISSION SEGMENT				HOIST	
	LESS	C.00	C.05		C.10	0.15	C.20	0.25	C.30		SUM
2.0											
1.8	1										1
1.7											
1.6	1										1
1.5	2										2
1.4	4										4
1.3	21	6		1							28
1.2	46	25									71
C.8											
0.7	10	1									11
C.6											
C.5		1									1
0.4											
SUM	85	33		1							119
TIME	11.4	4.3	C.C		0.	C.	C.	C.	0.		15.7

MANEUVER	NZ PEAKS FOR		MU	VS	NZ	BY MISSION SEGMENT					
	LESS	C.00	C.05		C.10	C.15	C.20	C.25	C.30		SUM
2.0											
1.8	1										1
1.7											
1.6	1										1
1.5	2					1	1				4
1.4	5				1	4					10
1.3	24	8		2	2	5	6				47
1.2	96	60		4	21	82	104	6			373
0.8											
C.7	15	1			2	33	91	6			148
C.6	1						4				5
0.5		1						1			2
0.4											
SUM	145	70		6	26	125	206	13			591
TIME	754.6	426.1	470.5	185	C.C	454	C.3	355	6.3	171.4	0. 12209.1

TABLE XXVII. MANEUVER  $n_z$  PEAKS FOR AIRSPEED VERSUS  $n_z$  BY WEIGHT, ALTITUDE, AND MISSION SEGMENT, SAMPLE I

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE LESS, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	1															1
0.8																
SLP	2															2
TIME	0.1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.1

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	1															1
0.8																
SLP	2															2
TIME	1.4	0.4	0.1	0.2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.2

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	2															2
0.8																
SLP	3															3
TIME	4.0	0.7	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.7

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 1000, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	2															2
1.1	1															1
1.0	4															4
0.8																
0.7	1															1
0.6																
SLP	9															9
TIME	0.6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.6

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 21000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.6																
1.5	1															1
1.4	2															2
1.3	2															2
1.2	6															6
C.8																
0.7	1															1
C.6																
SLP	12															12
TIME	22.7	9.5	1.2	1.5	C.5	0.8	0.9	0.5	0.8	0.5	0.	C.	C.	C.	0.	35.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 21000, ALTITUDE 2000, MISSICA SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	3				1											4
0.8																
SLP	4				1											5
TIME	9.3	7.7	4.1	3.9	2.3	7.6	5.2	8.8	8.6	4.3	0.8	C.	C.	C.	C.	58.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 21000, ALTITUDE 2000, MISSICA SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									1	1						2
C.8																
0.7								1								1
0.6																
SLP								1	1	1						3
TIME	C.	0.	0.	0.	C.	C.	C.	C.2	1.2	0.3	0.	C.	C.	C.	0.	1.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 21000, ALTITUDE 2000, MISSICA SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3						1	1									2
1.2	1	2				4	2		3		1					13
C.8																
0.7					2	1		1	2	1		1				8
C.6																
SLP	1	2			2	6	3	1	5	1	1	1				23
TIME	11.3	10.8	4.5	4.2	7.3	12.7	16.3	22.0	27.7	13.6	8.8	5.1	1.0	0.3	C.	145.7

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8																
C.7									2	1						3
C.6																
SLP									2	1						3
TIME	8.3	0.	0.	0.	0.9	2.5	4.1	11.5	21.0	8.8	5.1	2.7	1.1	0.	0.	69.9

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000, ALTITUDE 2000, PISSICA SEGMENT HOIST															
		LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																	
1.2		1															1
C.8																	
SLP		1															1
TIME	C.2	0.	C.	0.	C.	C.	C.	0.	0.	0.	0.	C.	C.	0.	C.	C.2	

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1					1	1									3
1.2	9	2			1	4	2		4	1	1					20
C.8																
C.7					2	1		2	4	2			1			12
C.6																
SLP	6	2			3	6	3	2	8	3	1	1				39
TIME	25.0	18.5	9.7	8.1	10.6	22.8	25.5	42.5	58.5	27.1	14.7	7.5	2.1	0.3	0.	272.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8									1							1
C.7									1							1
C.6									1							1
SLP									1							1
TIME	C.	C.	C.	C.	C.	C.	C.	0.6	0.9	0.	0.	C.	C.	C.	C.	1.5

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 21000, ALTITUDE 5000, MISSILE SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8									1							1
C.7									1							1
C.6									1							1
SLP									1							1
TIME	C.	0.	C.	0.	C.	C.8	C.8	7.3	5.2	1.7	1.5	0.5	1.2	0.1	C.	19.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 21000, ALTITUDE 5000, MISSILE SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3												1				1
1.2												1				1
0.8												1				1
SLP												1				1
TIME	C.	0.	C.	0.	C.3	C.	2.2	4.8	6.6	2.2	4.3	2.2	C.5	C.	C.	23.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 21000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3												1				1
1.2												1				1
C.8									2							2
0.7									2			1				3
C.6									2			1				3
SLP									2			1				3
TIME	C.	C.1	C.5	0.4	C.5	C.9	4.8	14.4	13.6	6.6	6.3	2.7	1.8	C.1	C.	52.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 21000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.6																1
1.5		1														1
1.4		2														2
1.3		4				1	1									6
1.2		12	2		1	4	2		4	1	1	1				28
C.9																
C.7		1			2	1		2	6	2		1				15
0.8																
SLP		20	2		3	6	3	2	10	3	1	2				52
TIME	49.1	24.5	10.5	10.3	11.5	24.5	31.2	37.4	72.8	34.2	21.0	10.6	3.5	C.4	C.	362.3

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 23000, ALTITUDE LESS, MISSILE SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																2
1.2	1	1														2
C.8																
SLP	1	1														2
TIME	1.8	0.2	C.	0.	C.	0.	C.	0.	C.	C.	0.	0.	C.	0.	C.	2.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 23000, ALTITUDE LESS, MISSILE SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																1
1.3	1															1
1.2	1															2
C.8																
SUP	2															2
TIME	C.2	0.	C.	0.	0.	0.	C.	0.	C.	0.	0.	0.	C.	C.	C.	C.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 23000, ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																1
1.3	1															3
1.2	2	1														4
C.8																
SUP	3	1														4
TIME	14.3	2.4	C.	0.3	C.1	C.1	0.	0.	0.	0.	0.	C.	C.	C.	0.	17.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 23000, ALTITUDE 1000, MISSILE SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																11
1.2	10	1														11
C.8																
SLP	10	1														11
TIME	22.3	7.6	1.7	1.0	1.0	0.9	C.7	0.	C.	0.	C.	0.	C.	0.	C.	33.2



TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1			1	1				1							4
0.8																
SLP	1			1	1				1							4
TIME	42.2	28.3	9.0	6.8	7.3	5.6	4.1	2.8	0.7	0.4	0.1	0.1	0.	0.	0.	107.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000, MISSION SEGMENT POIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	4															4
1.2	5															5
0.8																
0.7	1															1
0.6																
SLP	10															10
TIME	1.3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	4															4
1.2	14	1		1	1				1							20
0.8																
0.7	1															1
0.6																
SLP	21	1		1	1				1							25
TIME	117.5	36.4	10.9	7.5	8.3	6.5	4.8	2.8	0.7	0.4	0.1	0.1	0.	0.	0.	196.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3		2						2								4
1.2	20	2		1	1	2	1	1	4							36
0.8																
0.7	1					1				1						3
0.6																
SLP	22	4		1	1	1	1	1	4	1						44
TIME	35.7	58.0	25.2	28.6	38.8	32.6	39.1	28.3	28.0	13.3	3.7	0.	0.	0.	0.	331.3

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, PHYSICA SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3							2	1								3
1.2																
0.8																
0.7								1								1
C.6							1									1
C.5																
SLP							3	2								5
TYPE	C.	0.	C.	C.	C.	C.	2.6	3.1	2.9	1.6	1.4	0.2	C.	C.	C.	11.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, PHYSICA SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4				1		1										2
1.3					1	1	1		1							4
1.2	3	1	1	3	5	3	10	8	11	4	3	1				53
0.8																
0.7				2		3	2	1	10	7	1					26
C.6																
SLP	3	1	1	6	6	8	13	9	22	11	4	1				85
TYPE	55.3	42.9	21.2	29.2	36.8	53.5	77.1	96.0	113.4	63.0	33.4	6.4	2.1	0.2	0.	627.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, PHYSICA SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3						2	2	3							10
0.8																
0.7						1			2							3
C.6								1								1
C.5																
SLP	3					1	2	3	5							14
TYPE	74.6	0.5	C.	1.2	7.5	22.5	47.8	89.6	150.0	89.0	13.9	0.7	C.	0.	C.	497.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, PHYSICA SEGMENT PCIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	7															7
0.8																
0.7																
C.6																
C.5	1															1
0.4																
SLP	9															9
TYPE	2.1	0.	C.	0.	C.	C.	C.	0.	C.	0.	0.	C.	C.	C.	C.	2.1

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1			1		1										3
1.3	1	2			1	1	1	2	1							9
1.2	33	2	1	6	8	9	15	12	18	4	3	1				109
C.8																
0.7	1			2		5	2	2	12	8	1					33
0.6							1	1								2
C.5	1															1
0.4																
SLP	37	5	1	5	5	12	15	17	31	12	4	1				157
TIME	167.7	101.4	46.4	55.0	83.1	108.5	166.7	217.0	294.2	166.8	52.4	7.3	2.1	C.2	0.	1469.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 9000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									1							1
C.8																
0.7				1	2		3			1						7
0.6																
SLP				1	2		3		1	1						8
TIME	C.	1.4	2.2	6.8	7.2	5.7	19.3	15.5	5.0	2.8	0.2	C.	C.	C.	C.	74.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8																
0.7							1			1			1			3
0.6																
SLP							1			1			1			3
TIME	C.	0.	C.	0.	C.	C.	2.4	2.4	C.1	0.6	C.4	C.	C.1	0.	C.	6.0

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSION SEGMENT DESCENT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8																
C.7							1									1
C.6																
SLP							1									1
TIME	C.	2.4	4.4	2.5	3.5	5.4	16.5	26.8	22.4	17.8	4.1	1.7	C.	0.	C.	112.5

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 23000, ALTITUDE 5000, MISSILE SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3										1						1
1.2																
C.8																
C.7							1		3	2	1					7
0.6																
SLP							1		3	3	1					8
TIME	C.	4.7	6.0	13.2	20.0	33.8	65.6	66.0	89.7	35.8	20.4	C.1	C.	C.	C.	355.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 23000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3									1	1						2
1.2																
C.8																
C.7				1	2		6		3	4	1		1			18
0.6																
SLP				1	2		6		4	5	1		1			20
TIME	C.	8.7	12.6	22.9	31.1	52.9	103.8	110.7	121.3	57.0	25.2	1.8	C.1	0.	C.	548.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 23000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1			1		1										3
1.3	6	2			1	1	1	2	1							14
1.2	51	5	1	7	9	5	15	12	20	5	3	1				134
0.8																
C.7	2			3	2	5	8	2	15	12	2		1			52
0.6							1	1								2
0.5	1															1
0.4																
SLP	61	7	1	11	12	12	25	17	36	17	5	1	1			206
TIME	295.5	148.8	69.8	86.1	122.5	168.0	275.3	330.5	416.2	224.3	77.7	9.2	3.2	0.2	0.	2231.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 25000, ALTITUDE 5000, MISSILE SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SLP	1															1
TIME	5.3	0.2	1.0	0.7	0.2	C.	C.	C.	C.	0.	0.	C.	C.	C.	C.	7.4

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE LESS, PHYSICA SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3															3
0.8																
SLP	3															3
TIME	0.3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	4															4
0.8																
SLP	4															4
TIME	27.9	4.4	2.0	1.4	1.3	0.8	0.2	1.0	0.1	0.	0.	0.	0.	0.	0.	39.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, PHYSICA SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	8		1		1											10
0.8																
SLP	8		1		1											10
TIME	34.0	10.9	6.0	2.3	2.3	1.2	0.8	0.2	0.1	0.	0.	0.	0.	0.	0.	50.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, PHYSICA SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	2						1									3
1.2	1	1		1		1	1									5
0.8																
0.7		1														1
0.6																
SUP	3	2		1		1	2									9
TIME	50.2	25.6	8.8	5.3	6.5	8.3	7.1	2.7	2.6	0.5	0.4	0.	0.	0.	0.	117.9

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, MISSILE SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
C.7																
0.6	1															1
0.5																
SLP	2															2
TIME	104.2	0.4	C.	C.	C.	C.7	C.2	0.4	0.	C.	0.	C.	C.	C.	C.	109.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, MISSILE SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	4															4
1.2	4															4
C.8																
C.7	3															3
0.6																
SLP	11															11
TIME	1.8	0.	C.	0.	C.	0.	C.	0.	0.	0.	0.	C.	C.	C.	C.	1.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	6						1									7
1.2	14	1	1	1	1	1	1									20
0.8																
C.7	3	1														4
C.6	1															1
0.5																
SLP	24	2	1	1	1	1	2									32
TIME	191.0	36.9	14.7	7.7	8.8	10.1	8.1	3.3	2.7	0.5	0.4	C.	C.	C.	C.	284.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSILE SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4		1														1
1.3	2															2
1.2	14	4		1	1	2	3	1		1	1					28
C.8																
C.7				2	1		1	2			1					7
C.6																
SLP	16	5		3	2	2	4	3		1	2					38
TIME	66.4	93.7	44.2	52.0	56.6	53.6	45.6	47.3	27.5	18.5	7.6	1.7	C.	0.	C.	518.7

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.6																
1.5				1				1							2	
1.4					1										1	
1.3			1												1	
1.2				1			1	3	2						7	
C.8																
C.7								1	3						4	
C.6																
SLP			1	2	1		1	5	5						15	
TIME	C.	0.1	C.1	0.3	1.0	1.4	1.5	4.5	6.7	3.2	0.3	0.1	C.	0.	C.	19.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.4																
1.3								1							1	
1.2	2	1	3	2	4	4	1	5	5	1	1		1		35	
C.8																
C.7	1						1	4	2	3	3	1			15	
C.6																
C.5												1			1	
C.4																
SLP	3	1	3	2	4	4	2	9	8	4	2		1		32	
TIME	62.2	52.3	26.0	24.0	37.6	55.8	78.8	102.2	59.7	73.1	29.5	10.3	1.8	0.3	C.	654.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT STEADY																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2						2	3	3	2	2					12	
C.8																
C.7							1	7	2						10	
C.6									1						1	
C.5																
SLP						2	4	10	5	2					23	
TIME	98.6	27.6	14.2	3.1	5.8	40.0	104.9	174.9	208.1	95.6	45.7	1.2	C.	C.	C.	823.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT MOIST																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.4																
1.3	2														2	
1.2	14														14	
C.8																
SLP	16														16	
TIME	2.2	0.	C.	0.	C.	C.	C.	0.	C.	0.	C.	C.	C.	C.	C.	2.2

TABLE XXVII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.6																
1.5					1				1							2
1.4		1				1										2
1.3				1					1							6
1.2	30	5	2	3	6	6	6	10	11	10	4	1		1		56
C.8																
0.7	1			2	1		2	7	10	8	4	1				36
0.6										1						1
0.5												1				1
0.4																
SLP	25	6	3	6	8	7	8	17	23	19	8	3		1		144
TIME	229.4	173.7	84.6	79.4	105.0	150.9	234.7	328.9	342.0	190.4	83.5	13.2	1.8	0.3	0.	2018.0

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSILE SEGMENT ASCENT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2								1								1
0.8																
C.7							1									1
0.6							1									1
0.5																
SLP							2	1								3
TIME	C.	3.4	3.0	5.6	10.5	12.4	15.2	17.9	11.6	7.0	1.4	0.1	C.2	0.	C.	92.7

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSILE SEGMENT MANUVR															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2										1						1
0.8																
SLP										1						1
TIME	C.	0.	C.	0.	C.	C.	1.0	3.7	2.1	1.4	1.0	C.	C.	C.	C.	5.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSILE SEGMENT DESCENT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						1				1						2
C.8																
0.7											1					1
0.6																
SLP						1				1	1					3
TIME	0.	0.2	1.2	3.2	7.4	11.3	13.9	21.3	28.5	14.4	11.0	4.7	1.8	0.0	0.	115.1



TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 25000, ALTITUDE 5000, MISSICA SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3							1	2	1	1						5
1.2																
C.8							2	2	3		1					8
0.7																
0.6							3	4	4	1	1					13
SUP																
TIME	C.	1.3	1.1	5.6	15.2	33.7	97.7	170.3	228.8	70.6	21.5	7.2	12.5	1.7	0.	667.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 25000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3						1	1	3	1	3						9
1.2																
C.8							3	2	3		2					10
C.7							1									1
C.6																
0.5						1	5	5	4	2	2					20
SLP																
TIME	C.	5.0	5.3	14.7	33.5	57.5	131.8	213.2	270.9	93.5	34.9	12.0	14.6	1.8	C.	888.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 25000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.6																
1.5					1				1							2
1.4		1				1										2
1.3	10			1			1		1							13
1.2	48	6	4	4	7	8	8	13	12	13	4	1		1		129
C.8																
C.7	4	1		2	1		5	9	13	8	6	1				50
C.6	1						1			1						3
C.5												1				1
C.4																
SLP	63	8	4	7	9	9	15	22	27	22	10	3		1		200
TIME	448.4	220.0	106.7	103.2	148.5	219.4	374.8	546.4	615.7	284.4	118.9	25.2	16.4	2.1	C.	3230.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 5000, MISSICA SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
C.8																
SLP	1															1
TIME	3.4	1.3	0.1	0.2	C.4	C.4	C.	0.	C.	0.	C.	0.	C.	0.	C.	5.8

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SLP	1															1
TIME	12.2	2.3	0.1	0.2	0.6	0.4	0.	0.3	0.1	0.	0.	0.	0.	0.	0.	16.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1		1			1			1							4
0.8																
SUP	1		1			1			1							4
TIME	28.3	14.6	5.6	7.5	4.1	2.1	1.5	0.4	0.8	0.	0.	0.	0.	0.	0.	65.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 1000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2		1														1
0.8																
SLP		1														1
TIME	17.1	13.2	2.0	2.7	2.0	1.5	0.5	0.4	2.4	1.3	0.7	0.	0.	0.	0.	43.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 1000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7	2															2
0.6																
SLP	2															2
TIME	32.5	0.	0.	0.	0.2	0.2	0.	0.7	0.3	0.	0.	0.	0.	0.	0.	33.9

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1	1	1			1			1							5
C.8																
C.7	2															2
C.6																
SLP	3	1	1			1			1							7
TIME	78.2	27.8	7.6	10.2	6.2	3.8	2.5	1.4	3.4	1.3	0.7	C.	C.	C.	C.	143.3

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1	2	1		1		2									7
C.8																
C.7		1					2			1						4
C.6																
SLP	1	3	1		1		4			1						11
TIME	33.6	53.4	31.6	28.4	25.6	40.1	35.7	28.5	15.5	7.4	4.4	C.6	C.	C.	C.	308.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2				2	1		4									7
C.8																
C.7						3			2							5
C.6																
SLP				2	1	3	4		2							12
TIME	16.2	15.1	7.6	12.2	13.5	14.0	22.4	30.0	32.9	23.7	6.9	2.2	C.	C.	C.	196.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2							1	2	1							4
C.8																
SLP							1	2	1							4
TIME	20.3	11.5	9.2	5.8	14.8	27.5	34.9	108.0	123.3	93.7	40.7	12.4	C.1	C.	C.	522.2

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT POIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	1															1
0.8																
SLP	2															2
TYPE	C.2	0.	C.	0.	C.	C.	C.	0.	0.	0.	C.	C.	C.	C.	C.	C.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	2	2	1	2	2		7	2	1							19
0.8																
0.7		1				3	2		2	1						9
0.6																
SLP	3	3	1	2	2	3	6	2	3	1						29
TYPE	7C.3	80.0	48.4	46.4	58.C	82.7	114.5	166.7	171.7	124.8	52.C	15.1	C.1	0.	0.	1030.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 5000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2										1						1
0.8																
SLP										1						1
TYPE	C.	4.5	3.1	2.4	3.2	9.1	12.1	7.3	13.2	8.3	2.3	C.2	C.	C.	C.	62.C

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7								2		1						3
0.6																
SLP								2		1						3
TYPE	C.	0.	C.	C.	C.5	C.3	0.1	0.5	0.8	C.5	0.	C.	C.	C.	C.	2.6

TABLE XXVII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 5000, MISSION SEGMENT STEADY															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8							1	1	1	2						5
C.7							1	1	1	2						5
O.6							1	1	1	2						5
SLP																
TIME	C.	0.	C.	1.5	2.4	7.4	39.1	52.5	69.9	53.0	12.0	8.5	27.5	1.4	C.	276.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3										1						1
1.2																
C.8							1	3	1	3						8
C.7																
O.6							1	3	1	4						9
SLP																
TIME	C.	5.0	4.1	7.4	9.4	16.1	61.0	68.9	89.3	74.4	17.6	10.2	28.5	1.4	C.	393.1

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 27000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	4	3	2	2	2	1	7	2	2	1						26
C.8																
C.7	2	1				3	3	3	3	4						19
C.6																
SLP	7	4	2	2	2	4	10	5	5	5						46
TIME	160.7	115.1	60.1	64.2	74.3	103.0	177.9	237.3	264.5	200.4	70.3	25.4	28.6	1.4	C.	1583.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 29000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3							1									1
1.2																
C.8							1									1
SLP																
TIME	5.1	6.5	6.1	5.3	4.5	3.0	3.6	0.9	C.1	C.	C.	C.	C.	0.	C.	39.4

TABLE XXVII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 29000, ALTITUDE 2000, MISSILE SEGMENT DESCENT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3						1	3									4
1.2						1	3									4
C.8																
SLP																
TIME	6.6	2.7	1.4	1.7	4.4	3.9	4.1	4.0	3.4	1.3	C.	C.	C.	C.	C.	33.3

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 29000, ALTITUDE 2000, MISSILE SEGMENT STEADY															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8									2							2
C.7																
C.6																
SLP									2							2
TIME	6.8	C.	C.	C.	C.	C.4	1.2	4.4	18.1	6.2	C.	C.	C.	C.	C.	37.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 29000, ALTITUDE 2000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3						1	4									5
1.2																
C.8									2							2
C.7																
C.6																
SLP						1	4		2							7
TIME	22.9	9.2	7.4	7.0	5.2	7.2	8.5	9.3	21.6	7.5	C.	C.	C.	C.	C.	110.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 29000, ALTITUDE 5000, MISSILE SEGMENT STEADY															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8					1											1
C.7																
C.6																
SLP					1											1
TIME	C.	C.	C.	1.5	6.6	10.2	34.3	20.1	8.7	1.8	1.5	1.2	C.	C.	C.	65.8

TABLE XXVII - Continued

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000, ALTITUDE 5000															
		LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8						1											1
C.7																	
C.6						1											1
SUM						1											1
TIME	C.	C.9	C.5	3.6	5.2	11.2	39.2	22.6	10.5	2.2	1.5	1.4	C.	0.	0.	0.	59.6

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000															
		LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3							1	4									5
1.2																	
C.8						1				2							3
C.7																	
C.6						1	1	4		2							8
SUM						1	1	4		2							
TIME	38.2	14.5	8.7	11.3	18.5	19.1	44.0	32.1	32.1	9.8	2.5	1.4	C.	C.	C.	C.	232.3

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 31000, ALTITUDE 1000, MISSICN SEGMENT ASCENT															
		LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																	
1.2		1															1
C.8																	
SUM		1															1
TIME	1.6	0.	C.	C.	C.	C.	C.	C.	C.	0.	0.	0.	C.	C.	C.	C.	1.6

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 31000, ALTITUDE 1000															
		LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																	
1.2		1															1
C.8																	
SUM		1															1
TIME	28.2	0.4	C.1	0.	C.	C.	C.	C.	0.	0.	C.	0.	C.	C.	C.	C.	28.7

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 31000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
C.8																
SLM	1															1
TIME	66.2	17.9	4.7	3.3	3.2	6.0	1.2	0.	C.	C.	C.	C.	C.	0.	C.	102.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 35000, ALTITUDE 1000, PHYSICAL SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
C.8																
SLP	1															1
TIME	2.0	1.6	C.3	0.	C.	C.	C.	0.	0.	C.	0.	C.	C.	C.	C.	3.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 35000, ALTITUDE 1000, PHYSICAL SEGMENT POIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2	1															1
C.8																
SLP	2															2
TIME	C.1	0.	C.	0.	C.	C.	C.	0.	0.	C.	C.	C.	C.	C.	0.	C.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 35000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2	2															2
C.8																
SLP	3															3
TIME	5.2	1.8	C.3	0.	C.	C.	C.	0.	C.	C.	C.	C.	C.	C.	C.	7.2



TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 35000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2	2															2
C.3																
SLP	3															3
TIME	21.2	47.9	42.5	37.3	47.0	32.5	14.8	0.7	C.	C.	C.	0.	C.	0.	C.	244.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 36000. ALTITUDE LESS. MISSILE SECTANT MOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
C.0																
SLP	1															1
TYPE	C.2	0.	0.	C.	C.	C.	C.	0.	0.	C.	0.	C.	C.	C.	C.	C.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 36000. ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
C.0																
SLP	1															1
TIME	2.0	0.3	C.	0.	C.	C.	C.	0.	0.	C.	0.	0.	C.	C.	C.	2.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 36000. ALTITUDE 1000. MISSILE SECTANT MOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	2															2
1.2	1															1
0.0																
C.7	2															2
C.6																
SLP	5															5
TYPE	C.2	0.	C.	0.	C.	C.	C.	C.	C.	0.	C.	C.	C.	0.	C.	C.2

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	2															2
1.2	1															1
C.6																
C.7	2															2
C.6																
SLP	5															5
TIME	21.2	5.4	4.8	3.8	2.0	C.6	C.	C.	0.	C.	0.	C.	C.	C.	C.	41.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 2000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2			1													1
C.8																
SLP			1													1
TIME	8.3	15.4	7.8	20.4	22.5	16.1	6.9	4.1	C.4	C.	C.	C.	C.	0.	C.	109.9

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 2000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2			1													1
C.8																
SLP			1													1
TIME	23.6	41.2	42.0	53.6	58.7	63.6	21.7	5.9	0.5	C.	C.	C.	C.	C.	0.	311.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	2															2
1.2	2		1													3
C.8																
C.7	2															2
C.6																
SLP	6		1													7
TIME	46.8	53.4	50.4	67.1	74.0	71.2	24.2	7.5	C.7	C.6	C.	C.	C.	C.	C.	396.0

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 37000, ALTITUDE 1000, PHYSICAL SEGMENT ACIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	1															1
C.8																
SLM	2															2
TIME	C.3	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 37000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	1															1
C.8																
SUM	2															2
TIME	26.7	10.4	2.8	3.8	1.4	C.7	C.	C.	C.	C.	C.	C.	C.	C.	C.	49.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 37000, ALTITUDE 2000, PHYSICAL SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4							1									1
1.3																
1.2	1	1														2
C.8																
SLP	1	1					1									3
TIME	11.3	31.0	31.3	37.1	16.3	12.6	3.7	C.8	C.9	2.1	C.5	C.6	C.	C.	C.	151.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 37000, ALTITUDE 2000, PHYSICAL SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2				1												1
C.8																
SLM				1												1
TIME	14.1	36.5	28.1	40.4	23.6	13.6	10.1	1.7	C.5	C.	C.6	C.	C.	C.	C.	169.7

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 2000, MISSICA SEGMENT HCIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	6															6
0.8																
SLP	6															6
TIME	C.5	C.	C.	C.	C.	C.	C.	C.	0.	0.	0.	C.	C.	C.	C.	C.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4							1									1
1.3																
1.2	7	1		1												9
0.8																
SLP	7	1		1			1									10
TIME	32.4	81.5	104.4	141.6	92.2	58.6	26.1	4.3	1.9	4.2	4.4	1.6	C.	C.	C.	553.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4							1									1
1.3	1															1
1.2	8	1		1												10
0.8																
SLP	9	1		1			1									12
TIME	62.3	97.2	111.4	155.3	108.9	73.7	28.5	6.8	6.0	6.1	5.4	1.6	C.	C.	C.	663.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000, MISSICA SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SLP	1															1
TIME	C.7	0.2	C.	0.	C.	C.	C.	0.	C.	0.	C.	0.	C.	C.	C.	C.9

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SLP	1															1
TIME	4.1	0.8	0.4	0.	1.0	0.3	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 1000, MISSILE SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SLP	1															1
TIME	15.9	13.0	1.5	0.2	0.3	0.	0.2	0.	0.	0.	0.	0.	0.	0.	0.	39.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 1000, MISSILE SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	3															3
0.8																
0.7	1															1
0.6																
SLP	5															5
TIME	0.3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	4															4
0.8																
0.7	1															1
0.6																
SLP	6															6
TIME	21.8	21.2	7.2	3.6	1.7	1.1	0.3	0.	0.	0.	0.	0.	0.	0.	0.	66.9

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
C.8																
SLP	1															1
TIME	39.4	87.7	56.0	59.2	22.5	16.1	9.3	1.3	C.	C.	C.	0.	C.	0.	C.	283.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2			1		1											2
C.8																
C.7	1															1
C.6																
SLP	1		1		1											3
TIME	16.8	47.9	33.0	38.0	29.1	23.5	14.6	6.0	1.7	0.5	C.	C.	C.	0.	C.	211.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						1										1
C.8																
SLP						1										1
TIME	6.2	19.2	43.1	53.7	66.5	57.5	14.3	1.0	0.7	0.	0.	C.	C.	C.	C.	262.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3															3
C.8																
SLP	3															3
TIME	C.1	0.	C.	0.	C.	C.	C.	C.	C.	0.	C.	C.	C.	0.	C.	C.1

TABLE XXVII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 38000, ALTITUDE 2000															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2	4		1		1	1										7
C.8																
C.7	1															1
C.6																
SLP	5		1		1	1										8
TIME	52.6	154.8	132.1	151.0	112.0	57.0	34.2	8.3	2.4	0.5	0.	C.	C.	0.	C.	757.0

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 38000															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.4																
1.3	1															1
1.2	9		1		1	1										12
C.8																
C.7	2															2
C.6																
SLP	12		1		1	1										15
TIME	94.5	193.0	150.4	142.5	150.0	117.8	39.9	9.8	2.8	0.5	0.	C.	0.	C.	C.	951.6

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 39000, ALTITUDE 1000, MISSILE SEGMENT ASCENT															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2	1															1
C.8																
SLP	1															1
TIME	15.2	5.7	3.1	1.0	1.1	1.8	0.4	0.	C.	0.	0.	C.	C.	C.	C.	32.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 39000, ALTITUDE 1000, MISSILE SEGMENT MCIST															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.7																
1.6	1															1
1.5																
1.4																
1.3	2															2
1.2	1															1
C.8																
SLP	4															4
TIME	C.3	C.	C.	C.	C.	C.	C.	0.	0.	0.	0.	C.	C.	C.	C.	C.3

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 39000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.7																
1.6	1															1
1.5																
1.4																
1.3	2															2
1.2	2															2
C.8																
SLP	5															5
TIME	39.1	15.1	1.5	2.0	1.5	1.0	0.4	0.	0.	0.	0.	0.	0.	0.	0.	63.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 39000, ALTITUDE 2000, MISSILE SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1			1												2
C.8																
SLP	1			1												2
TIME	32.9	77.3	47.0	43.6	26.8	14.5	3.0	0.3	0.2	0.	0.	0.	0.	0.	0.	245.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 39000, ALTITUDE 2000, MISSILE SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.8																
0.7						1										1
0.6																
SLP						1										1
TIME	12.3	45.7	24.2	24.3	27.6	20.4	10.1	3.2	0.7	0.4	0.	0.	0.	0.	0.	168.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY HEIGHT 39000, ALTITUDE 2000, MISSILE SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.6																
1.5	1															1
1.4																
1.3	4															4
1.2	2															2
C.8																
C.7	1															1
0.6																
SLP	8															8
TIME	0.5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.5



TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.6																
1.5	1															1
1.4																
1.3	4															4
1.2	3			1												4
0.8																
0.7	1					1										2
0.6																
SLP	9			1		1										11
TIME	51.4	147.4	56.8	121.0	107.0	73.3	32.8	6.2	3.0	0.4	0.	0.	0.	0.	0.	639.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.7																
1.6	1															1
1.5	1															1
1.4																
1.3	6															6
1.2	5			1												6
0.8																
0.7	1					1										2
0.6																
SLP	14			1		1										16
TIME	94.1	171.0	123.7	173.7	146.1	53.9	37.0	6.4	3.2	0.4	0.	0.	0.	0.	0.	649.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE LESS, PISCICA SEGMENT MOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2	1															1
0.8																
SLP	2															2
TIME	0.1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2	1															1
0.8																
SLP	2															2
TIME	0.8	1.4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.2

TABLE XXVII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 1000, MISSION SEGMENT DESCENT															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2	4															4
C.8	4															4
SUM																
TIME	11.8	7.7	1.2	0.7	1.6	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	23.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 1000, MISSION SEGMENT MCIST															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
2.0																
1.8	1															1
1.7																
1.6																
1.5																
1.4																
1.3	2															2
1.2	5															5
C.8																
C.7	1															1
C.6																
SUM	9															9
TIME	C.8	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.8

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 1000															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
2.0																
1.8	1															1
1.7																
1.6																
1.5																
1.4																
1.3	2															2
1.2	5															5
C.8																
C.7	1															1
C.6																
SUM	14															13
TIME	44.4	20.7	4.6	7.2	3.4	1.7	1.2	C.3	C.	C.	C.	C.	C.	C.	C.	64.5

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000, MISSION SEGMENT ASCENT															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2	1															1
C.8																
SUM	1															1
TIME	1.2	15.4	93.0	51.2	27.0	15.5	10.0	1.0	C.1	C.	C.	C.	C.	C.	C.	395.5

TABLE XXVII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000, MISSILE SEGMENT DESCNT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3				1											1	
1.2																
C.8						1									1	
C.7																
C.6					1	1									2	
SUM																
TIME	23.0	46.5	28.4	39.3	41.2	23.8	10.6	2.1	1.4	0.4	0.5	0.	C.	C.	C.	217.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000, MISSILE SEGMENT HCIST																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.4																
1.3	1														1	
1.2	5														5	
C.8																
C.7	1														1	
C.6																
SLP	7														7	
TIME	C.5	0.	C.	C.	C.	C.	0.	0.	0.	0.	0.	C.	C.	C.	C.	C.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.4																
1.3	1														1	
1.2	6			1											7	
C.8																
C.7	1					1									2	
C.6																
SLP	8			1	1										10	
TIME	87.1	257.3	149.2	154.4	152.1	72.8	37.3	5.6	3.1	1.0	C.5	C.	C.	0.	C.	920.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
2.0																
1.8	1														1	
1.7																
1.6																
1.5																
1.4	1														1	
1.3	3														3	
1.2	16			1											17	
C.8																
C.7	2					1									3	
C.6																
SLP	23			1	1										25	
TIME	134.9	252.4	170.0	208.7	205.2	109.8	55.8	7.7	3.3	1.0	C.5	C.	C.	C.	0.	1194.3

TABLE XXVII - Concluded

MANEUVER NZ PEAKS FOR VELOCITY VS NZ																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
2.0																1
1.8	1															1
1.7																
1.6	1															1
1.5	2				1				1							4
1.4	5	1		1		2	1									10
1.3	34	2		1	1	2	3	2	2							47
1.2	158	17	9	15	21	20	34	27	38	20	8	3		1		373
C.6																
C.7	16	2		5	6	11	16	16	39	26	8	2	1			148
C.6	1						2	1		1						5
C.5	1											1				2
C.4																
SLM	219	22	5	22	25	35	58	46	80	47	16	6	1	1		591
TIME	1568.2	1433.2	527.6	1133.1	1121.3	1058.7	1108.1	1246.0	1423.9	762.9	296.5	73.2	52.2	4.1	C. 12209.1	

TABLE XXVIII.  $n_x$  PEAKS FOR AIRSPEED VERSUS  $n_x$  BY WEIGHT, SAMPLE I

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.10																
0.15	1															1
0.20																
SUM	1															1
MINS	0.8	0.5	0.	0.4	0.1	0.8	0.9	3.0	6.5	1.2	0.2	0.	0.	0.	0.	14.4

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 21000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20									1			1	1	1		4
-0.15								2	1	2		1	1	1		8
-0.10																
0.10	13															13
0.15	15															15
0.20	5															5
0.25																
SUM	33							2	2	2		2	2	2		45
MINS	49.1	24.5	10.5	10.3	11.9	24.5	31.2	57.4	72.8	34.2	21.0	10.6	3.9	0.4	0.	362.3

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 23000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.30																
-0.25									1							1
-0.20								1	2		1					4
-0.15								1	5	3	6	2	4			21
-0.10																
0.10	27	1			1											29
0.15	47															47
0.20	18															18
0.25	1															1
0.30																
SUM	93	1			1			2	8	3	7	2	4			121
MINS	299.5	148.8	69.8	86.1	122.5	168.0	275.3	330.5	416.2	224.3	77.7	9.2	3.2	0.2	0.	2231.3

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 25000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20	1									1	2	1				5
-0.15									4	2	2	2		1		11
-0.10																
0.10	29	3	1		1											34
0.15	64															64
0.20	18															18
0.25	3															3
0.30																
0.35	1															1
0.40	1															1
SUM	117	3	1		1				4	3	4	3		1		137
MINS	448.4	220.0	106.7	103.2	148.5	219.4	374.8	546.4	615.7	284.4	118.9	25.2	16.4	2.1	0.	3230.0

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 27000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15											1					1
-0.10																
0.10	13	2	1													13
0.15	26															26
0.20	9															9
0.25																
SUM	45	2	1								1					49
MINS	160.7	115.1	60.1	64.2	74.1	103.0	177.9	237.3	264.5	200.4	70.3	25.4	28.6	1.4	0.	1583.2

TABLE XXVIII - Continued

	NX PEAKS FOR		AIRSPEED VS		NX	BY	WEIGHT 29000									
	LESS	40	50	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10	1															1
0.15	6															6
0.20																
SUM	7															7
MIN	38.2	14.5	6.7	11.3	19.5	19.1	44.0	32.1	32.1	9.8	2.5	1.4	0.	0.	0.	232.3

	NX PEAKS FOR		AIR SPEED	VS	NX	BY	WEIGHT	31000									
	LESS	40	50	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-0.20																	
-0.15								1								1	
-0.10																	
0.10		1														1	
0.15		1														1	
0.20																	
SUM	2						1									3	
MIN	66.2	17.9	4.7	3.3	3.1	6.0	1.2	0.	0.	0.	0.	0.	0.	0.	0.	102.5	

	NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 33000															
	LESS	40	50	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10		3														3
0.15		4														4
0.20		1														1
0.25																
SUM		8														8
MIN	40.5	57.0	15.7	19.4	11.7	18.9	1.6	0.3	0.	0.	0.	0.	0.	0.	0.	154.3

	NX PEAKS FOR		AIRSPEED		VS	NX	BY WEIGHT		35000									
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM		
-0.10																		
0.10		1														1		
0.15		5														5		
0.20		1														1		
0.25																		
SUM	7															7		
MIN	21.2	47.9	42.5	37.3	47.1	32.5	14.8	0.7	0.	0.	0.	0.	0.	0.	0.	244.1		

	NX PEAKS FOR		AIR SPEED	VS	NX	BY	WEIGHT	36000									
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-0.10																	
0.10	3															3	
0.15	4															4	
0.20	5															5	
0.25																	
SUM	17															17	
MIN	40.8	53.4	50.4	57.1	74.1	71.2	24.2	7.5	0.7	0.6	0.	0.	0.	0.	0.	396.7	

TABLE XXVIII - Concluded

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 37000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15									1		1					2
-0.10																
0.10	5															5
0.15	9															9
0.20	4															4
0.25																
SUM	18								1		1					20
MINS	62.3	97.2	111.4	155.3	108.9	73.7	28.5	6.8	6.0	6.1	5.4	1.6	0.	0.	0.	663.0

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 38000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10	4	2			1											7
0.15	9	1														10
0.20	5															5
0.25	2															2
0.30																
SUM	22	3			1											24
MINS	94.3	193.0	150.4	192.9	150.9	117.8	39.5	9.8	2.8	0.5	0.	0.	0.	0.	0.	951.6

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 39000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10	2			1		1										4
0.15	12															12
0.20	7															7
0.25	1															1
0.30																
SUM	22			1		1										24
MINS	94.1	171.0	123.7	173.7	146.1	93.9	37.0	6.4	3.2	0.4	0.	0.	0.	0.	0.	849.5

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 40000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10	6	1	2													9
0.15	15															15
0.20	9															9
0.25	1															1
0.30																
SUM	30	1	2													33
MINS	139.9	292.4	170.0	208.7	205.7	109.8	55.8	7.7	3.3	1.0	0.5	0.	0.	0.	0.	1194.3

TABLE XXIX.  $n_x$  PEAKS FOR AIRSPEED VERSUS  $n_x$  BY ALTITUDE, SAMPLE I

	VA PEAK, FCM	AIRSPED	VS	NK HY	ALTITUDE	LESS										
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10	1															1
0.15	3															3
0.20	7															7
0.25																
SUM	17															17
MINS	84.4	13.3	2.7	2.2	3.0	1.7	2.6	1.3	0.2	0.	0.	0.	0.	0.	0.	109.4

	$n_x$ PEAKS FOR	AIRSPEED	VS	$n_x$ BY	ALTITUDE	1000										
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20	1															1
-0.15																
-0.10																
0.10	36	2														36
0.15	84															84
0.20	24															24
0.25	1															1
0.30																
0.35	1															1
0.40	1															1
SUM	146	2														148
MINS	633.6	191.9	58.1	48.6	34.4	28.0	18.1	8.6	7.6	2.8	1.8	0.1	0.	0.	0.	1033.6

	$n_x$ PEAKS FOR	AIRSPEED	VS	$n_x$ BY	ALTITUDE	2000										
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.30																
-0.25									1							1
-0.20								1	2	1	3	1		1		9
-0.15								2	9	6	9	4	5	1		36
-0.10																
0.10	70	6	4	1	3	1										85
0.15	130	2														132
0.20	50															50
0.25	7															7
0.30																
SUM	237	8	4	1	3	1		3	12	7	12	5	5	2		320
MINS	849.6	1161.6	773.9	869.3	848.5	786.6	716.4	798.6	905.4	523.9	207.8	45.1	7.2	0.8	0.	8494.6

	$n_x$ PEAKS FOR	AIRSPEED	VS	$n_x$ BY	ALTITUDE	5000										
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20																
-0.15							1	1		1	1	1		1		3
-0.10																
0.10	1															1
0.15																
SUM	1						1	1	3	1	1	2	1	1		12
MINS	0.5	66.3	93.0	213.0	235.4	242.4	373.1	437.5	510.7	236.2	96.9	28.1	45.0	3.2	0.	2571.5

	$n_x$ PEAKS FOR	AIRSPEED	VS	$n_x$ BY	ALTITUDE	SUM										
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.30																
-0.25									1							1
-0.20	1							1	3	1	3	2	1	1		13
-0.15							1	3	11	7	10	5	5	2		44
-0.10																
0.10	105	9	4	1	3	1										123
0.15	223	2														225
0.20	81															81
0.25	8															8
0.30																
0.35	1															1
0.40	1															1
SUM	420	11	4	1	3	1	1	4	15	8	13	7	6	3		497
MINS	1568.2	1433.2	927.6	1133.1	1121.1	1058.7	1108.1	1246.0	1423.9	762.9	296.5	73.2	52.2	4.1	0.	12209.0



TABLE XXX.  $n_x$  PEAKS FOR CYCLIC DEFLECTION VERSUS  $n_x$   
BY MISSION SEGMENT, SAMPLE I

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. ASCENT

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20			1							1
-0.15			4	5						9
-0.10										
0.10			1	14	32					47
0.15			1	10	73					84
0.20			1	4	24	1				30
0.25				1	5					6
0.30										
SUM			8	34	134	1				177

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. MANUVR

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20				1						1
-0.15			1	1						2
-0.10										
SUM			1	2						3

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. DESCNT

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.30										
-0.25				1						1
-0.20				4	1					5
-0.15			1	17	3					21
-0.10										
0.10			1	10	27					38
0.15				18	64	1				83
0.20				9	22					31
0.25					1					1
0.30										
SUM			2	59	113	1				180

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. STEADY

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20					4					6
-0.15					12					12
-0.10										
0.10					34					38
0.15				1	57					58
0.20					20					20
0.25					1					1
0.30										
0.35					1					1
0.40					1					1
SUM				1	136					137

TABLE XXX - Concluded

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG.										SUM
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.30										
-0.25				1						1
-0.20			1	5	7					13
-0.15			6	23	15					44
-0.10										
0.10			2	24	97					123
0.15			1	29	194	1				225
0.20			1	13	66	1				81
0.25				1	7					8
0.30										
0.35					1					1
0.40					1					1
SUM			11	96	388	2				497

TABLE XXXI.  $n_y$  PEAKS FOR AIRSPEED VERSUS  $n_y$  BY WEIGHT, SAMPLE I

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 21000																
	LESS	40	50	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20									1							1
-0.15		1							1				1			3
-0.10																
0.10		2		1				2		1	4	1	3			14
0.15									2							
SUM	2	1		1				2	2	1	4	1	4			18
MINS	44.4	44.5	10.3	10.3	11.4	24.5	3.2	57.4	72.8	34.2	21.0	10.6	3.9	0.4	0.	362.3

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 23000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20		1														1
-0.15	4	3	2		3	3	5	2	2							24
-0.10																
0.10	3	1			1	1		3	3	3						16
0.15																
SUM	7	5	2		5	4	5	5	5	3						41
MINS	239.5	148.8	64.8	86.1	122.5	168.0	275.3	330.5	416.2	224.3	77.7	9.2	3.2	0.2	0.	2231.3

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 25000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20	2	1														3
-0.15	5	7	3	1	4	4	2	3	1	1	1	1				33
-0.10																
0.10	9	1				2			4	2						20
0.15																
0.20	1															1
0.25																
SUM	17	9	3	1	5	6	2	3	5	3	1	1				57
MINS	448.4	220.3	105.7	103.2	148.5	219.4	374.8	546.4	615.7	284.4	114.4	25.2	16.4	2.1	0.	3230.0

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 27000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15	1	2		1	1	1	3	1	3	1	1					15
-0.10																
0.10		1						1								2
0.15								1								1
0.20																
SUM	1	3		1	1	1	3	3	3	1	1					18
MINS	150.7	115.1	60.1	64.2	74.3	173.0	177.5	237.3	254.5	230.4	70.3	25.4	28.6	1.4	0.	1593.2

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 29000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15				1			1									2
-0.10																
SUM				1			1									2
MINS	30.2	14.5	7.7	11.3	12.	17.1	44.0	32.1	32.1	3.9	4.5	1.4	0.	0.	0.	232.3

TABLE XXXI - Continued

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 33000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15	1															1
-0.10																
0.10	1															1
0.15																
SUM	2															2
MEANS	60.5	57.0	14.7	19.4	11.0	10.9	2.6	0.3	0.	0.	0.	0.	0.	0.	0.	154.3

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 35000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10	1															1
0.15																
SUM	1															1
MEANS	21.2	47.9	42.5	37.3	47.0	32.5	14.8	0.7	0.	0.	0.	0.	0.	0.	0.	244.1

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 36000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15						1										1
-0.10																
0.10	3															3
0.15																
SUM	3					1										4
MEANS	46.8	53.4	50.4	67.1	74.0	71.2	24.2	7.5	0.7	0.6	0.	0.	0.	0.	0.	396.0

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 37000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15	3		1	1			1									6
-0.10																
0.10	3			1												4
0.15	3															3
0.20																
SUM	9		1	2			1									13
MEANS	52.3	57.2	111.4	155.3	104.0	73.7	28.5	6.8	6.0	6.1	5.4	1.6	0.	0.	0.	563.0

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 38000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15		4	1	1		1										7
-0.10																
0.10	5	1														7
0.15																
SUM	5	5	1	1		1										14
MEANS	74.5	193.0	150.4	192.9	150.0	117.8	39.8	9.8	2.6	0.5	0.	0.	0.	0.	0.	951.6

TABLE XXXI - Concluded

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 39000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15	1	6	1													8
-0.10																
0.10	8	2		1												11
0.15																
SUM	9	8	1	1												19
MIN5	14.1	171.0	123.7	173.7	146.1	93.9	37.0	6.4	3.2	0.4	1.	0.	0.	0.	0.	447.5

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 40000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20	1															1
-0.15	6	2		1												11
-0.10																
0.10	2	1		1												5
0.15																
SUM	9	3		2		1										17
MIN5	139.9	292.4	170.0	208.7	205.1	109.8	51.8	7.7	3.3	1.0	0.5	0.	0.	0.	0.	1194.3

TABLE XXXII.  $n_y$  PEAKS FOR AIRSPEED VERSUS  $n_y$  BY ALTITUDE, SAMPLE I

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.15																1
-0.10																
-0.10																2
0.15																
0.15																3
SUM																3
MEANS	84.6	13.3	2.7	2.2	3.7	1.7	0.6	1.3	0.2	0.	0.	0.	0.	0.	0.	104.4

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 1000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20																2
-0.15																17
-0.10																
0.10																16
0.15																
0.20																1
0.25																
SUM																36
MEANS	633.6	191.9	54.1	48.6	34.4	28.0	18.1	8.6	7.6	2.8	1.8	0.1	0.	0.	0.	1033.6

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 2000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20																4
-0.15																35
-0.10																
0.10																52
0.15																4
0.20																
SUM																145
MEANS	949.5	1161.5	773.9	869.1	848.2	796.6	715.4	708.6	735.4	523.9	207.8	45.1	7.2	0.9	0.	8494.6

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 5000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.15																9
-0.10																
0.10																14
0.15																
0.20																22
SUM																22
MEANS	0.5	66.3	43.0	213.3	135.4	242.4	375.1	437.5	510.7	236.2	87.7	28.1	45.0	3.2	0.	2571.5

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 10000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20																5
-0.15																111
-0.10																
0.10																44
0.15																4
0.20																1
0.25																
SUM																206
MEANS	1350.2	1433.2	927.5	1133.1	1121.7	1078.7	1105.1	1246.0	1474.7	742.7	746.5	73.2	52.2	4.1	0.	12209.0

TABLE XXXIII.  $n_y$  PEAKS FOR CYCLIC DEFLECTION VERSUS  $n_y$   
BY MISSION SEGMENT, SAMPLE I

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. ASCENT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20				3						3
-0.15			8	24	13					45
-0.10										
0.10			6	12	11					29
0.15				1						1
0.20										
SUM			14	40	24					78

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. MANUVR										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.20										
-0.15				1	2					3
-0.10										
SUM				1	2					3

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. DESCNT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20					1					1
-0.15			3	24	21					48
-0.10										
0.10			3	9	17					29
0.15										
SUM			6	33	39					78

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. STEADY										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20					2					2
-0.15					15					15
-0.10										
0.10					26					26
0.15					3					3
0.20					1					1
0.25										
SUM					47					47

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. SUM										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20				3	3					6
-0.15			11	49	51					111
-0.10										
0.10			9	21	54					84
0.15				1	3					4
0.20					1					1
0.25										
SUM			20	74	112					206

TABLE XXXIV.  $n_x$  PEAKS FOR  $n_x$  VERSUS  $n_z$ , SAMPLE I

NX PEAKS FOR NX VS NZ																
	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
1.3																
1.2					1	2	1		2			1				7
0.8						11	43		121	225	81	7		1	1	490
0.7																
SUM					1	13	44		123	225	81	8		1	1	497

TABLE XXXV.  $n_x$  PEAKS FOR  $n_y$  VERSUS  $n_x$ , SAMPLE I

NX PEAKS FOR NY VS NX																
	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
-0.30																
-0.25								1								1
-0.20								13								13
-0.15								44								44
-0.10																
0.10								123								123
0.15								225								225
0.20								81								81
0.25								8								8
0.30																
0.35								1								1
0.40								1								1
SUM								497								497

TABLE XXXVI.  $n_y$  PEAKS FOR  $n_x$  VERSUS  $n_y$ , SAMPLE I

NY PEAKS FOR NX VS NY																
	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
-0.25								4	1						1	6
-0.20								86	17	5	2					111
-0.15																
-0.10																
0.10						1	3	40	29	9	2					84
0.15								1	3							4
0.20								1								1
0.25																
SUM						1	4	132	90	14	4				1	206



TABLE XXVII.  $n_y$  PEAKS FOR  $n_y$  VERSUS  $n_z$ , SAMPLE I

NY PEAKS FOR NY VS NZ															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.0															
1.8						1									1
1.7															
1.6															
1.5															
1.4						2									2
1.3					1	3									4
1.2					2	1		1							4
0.8					3	104		83	4	1					195
0.7															
SUM					6	111		84	4	1					206

TABLE XXXVIII.  $n_z$  PEAKS FOR  $n_x$  VERSUS  $n_z$ , SAMPLE I

NZ MANEUVER PEAKS FOR NX VS NZ															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.0															
1.9							1								1
1.7															
1.6									1						1
1.5							2	1	1						4
1.4							7	3	3						10
1.3							15	13	16	1					47
1.2					6	9	207	72	56	19	1	1		1	373
0.8															
0.7					3	4	129	10	2						148
0.6							4	1							5
0.5							1		1						2
0.4															
SUM					9	15	366	97	80	20	1	1		1	591

TABLE XXXIX.  $n_z$  PEAKS FOR  $n_y$  VERSUS  $n_z$ , SAMPLE I

NZ MANEUVER PEAKS FOR NY VS NZ															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.0															
1.8							1								1
1.7															
1.6								1							1
1.5							2	2							4
1.4							2	8							10
1.3							1	46							47
1.2					2	1	368	1	1						373
0.8															
0.7								147		1					148
0.6								5							5
0.5								2							2
0.4															
SUM					2	7	579	1	1	1					591

TABLE XL. TIME FOR ALTITUDE VERSUS AIRSPEED BY WEIGHT  
AND MISSION SEGMENT, SAMPLE II

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.6	1.4	6.4				8.4
40		0.5	4.9	1.6			7.0
60		0.4	1.1	0.6			2.0
65			1.6	0.3			1.9
70			0.7	0.1			0.8
75			3.2	0.8			3.9
80		0.2	4.2	0.1			4.5
85			4.8				4.8
90			3.2	0.4			3.6
95			0.3	1.4			1.7
100			0.1	0.3			0.4
105							
110							
115							
120							
SUM	0.6	2.4	30.4	5.7			39.1

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.7	11.5	17.1				29.3
40	0.4	4.5	14.2				19.1
60		1.7	3.5				5.2
65		1.6	4.8				6.4
70		1.6	7.3				9.0
75		0.8	10.5	0.4			11.7
80		1.4	15.6	2.1			19.1
85		0.4	14.5	3.3			18.1
90		0.4	13.6	3.2			17.3
95			12.7	2.1			14.8
100			11.9	0.6			12.6
105			1.6	0.2			1.8
110							
115							
120							
SUM	1.1	23.9	127.4	11.9			164.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS		1.4	11.8				13.3
40							
60			0.1				0.1
65			1.3				1.3
70			4.5				4.5
75			1.1	0.6			1.7
80			1.7	0.2			1.9
85			11.4				11.4
90			11.2				11.2
95			9.9	0.2			10.1
100			1.8				1.8
105							
110							
115							
120							
SUM		1.4	54.9	1.0			57.3

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 21000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.3	14.3	35.3				50.9
40	0.4	5.0	19.1	1.6			26.1
60		2.1	4.6	0.6			7.3
65		1.6	7.7	0.3			9.6
70		1.6	12.6	0.1			14.3
75		0.8	14.8	1.7			17.3
80		1.6	21.5	2.4			25.6
85		0.4	30.8	3.3			34.4
90		0.4	28.0	3.6			32.0
95			22.8	3.7			26.6
100			13.8	1.0			14.8
105			1.6	0.2			1.8
110							
115							
120							
SUM	1.7	27.8	212.7	18.6			260.7

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.3	20.4	42.5	0.2			65.4
40	1.0	7.0	69.2	3.5			80.6
60	0.6	1.6	25.3	3.2			30.6
65		2.0	35.0	5.3			42.2
70		3.4	31.2	8.3			42.9
75		1.7	49.0	14.2			64.9
80		0.8	54.4	17.5			72.6
85		0.3	58.2	18.1			76.6
90		0.9	41.2	9.1			51.3
95		0.3	16.4	7.6			24.3
100			3.7	1.2			4.9
105			0.2	1.6			1.9
110							
115							
120							
SUM	3.8	38.4	426.3	89.7			558.2

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	6.2	48.2	83.8				138.2
40	3.2	27.2	57.9	1.1			89.4
60	0.2	7.8	31.2	0.8			40.0
65	0.4	6.4	35.4	1.0			43.1
70	0.1	6.0	52.4	2.3			60.6
75	0.4	7.9	60.0	7.4			75.7
80	0.3	6.4	93.3	22.4			122.5
85		5.6	121.1	30.6			157.2
90		3.3	132.1	32.6			168.1
95		2.2	88.1	23.5			113.7
100		0.4	36.7	9.2			46.3
105			10.5	1.4			11.8
110			0.3				0.3
115							
120							
SUM	10.7	121.3	802.7	132.3			1066.9

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	5.3	33.1	85.2				123.6
40			2.2				2.2
60			7.7				7.7
65		0.1	10.7	0.9			11.7
70		1.0	13.2	2.8			17.0
75		1.2	32.9	32.0			66.1
80		4.1	83.3	55.7			143.1
85		0.2	125.5	72.8			198.6
90		2.0	117.2	89.6			208.9
95		1.6	90.9	32.1			124.5
100			18.8	10.0			28.8
105			0.4	2.3			2.7
110				2.4			2.4
115							
120							
SUM	5.3	43.3	588.1	300.7			937.4

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 23000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	13.8	101.7	211.5	0.2			327.2
40	4.2	34.2	129.3	4.6			172.2
60	0.8	9.3	64.1	4.0			78.3
65	0.4	8.5	81.0	7.2			97.1
70	0.1	10.4	96.7	13.3			120.5
75	0.4	10.8	141.9	53.6			206.7
80	0.3	11.3	231.0	95.7			338.3
85		6.1	304.8	121.5			432.4
90		6.3	290.6	131.4			428.2
95		4.1	195.3	63.1			262.6
100		0.4	59.2	20.4			80.0
105			11.1	5.3			16.4
110			0.3	2.4			2.7
115							
120							
SUM	19.8	203.0	1817.1	522.7			2562.5

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	4.3	30.6	64.6	4.4			103.8
40	0.4	10.5	87.1	8.5			106.5
60		3.4	45.7	3.7			52.8
65		3.6	59.3	7.3			70.2
70	0.2	2.3	60.3	11.2			73.9
75	0.8	1.8	90.5	20.7			113.8
80	0.6	1.5	76.3	24.9			103.2
85	0.1	2.2	66.6	29.0			97.9
90		0.4	50.4	23.7			74.4
95		0.4	29.9	11.4			41.7
100			7.0	1.8			8.8
105			0.3	0.1			0.4
110							
115							
120							
SUM	6.3	56.8	637.8	146.6			847.4

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS							
40							
60							
65							
70							
75			0.3				0.3
80			3.2				3.2
85			6.0				6.0
90			2.7				2.7
95			0.0				0.0
100							
105							
110							
115							
120							
SUM			12.3				12.3

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	4.6	50.8	87.0	4.3			146.7
40	1.0	24.4	58.0	0.4			83.8
60		7.1	23.7	1.4			32.3
65		6.0	29.5	3.0			38.6
70		4.9	42.6	8.5			56.0
75	0.8	6.1	86.3	11.1			104.3
80	0.5	3.8	117.2	24.3			145.8
85	0.1	2.6	124.3	37.0			163.9
90		2.0	101.1	40.7			143.7
95		1.5	78.2	27.9			107.5
100			41.4	10.9			52.3
105			7.5	1.9			9.4
110			0.3				0.3
115							
120							
SUM	7.0	109.2	797.2	171.3			1084.8

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	15.0	71.2	131.6	2.4			220.2
40		0.6	8.1	1.6			10.3
60		1.5	7.7	0.4			9.5
65		1.7	11.7	7.4			20.8
70		2.6	43.2	13.7			59.5
75		1.1	90.4	35.8			127.3
80		0.3	143.9	101.2			245.4
85		0.7	200.6	75.2			276.6
90			206.8	106.4			313.2
95			91.0	83.1			174.1
100			32.5	12.7			45.2
105			5.4				5.4
110							
115							
120							
SUM	15.0	79.6	972.9	440.0			1507.5

TABLE XL - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 25000, BY MISSION SEG.							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	23.9	152.6	283.2	11.0			470.7
40	1.4	35.5	153.2	10.5			200.6
60		12.0	77.1	5.5			94.6
65		11.3	100.5	17.7			129.5
70	0.2	9.8	146.1	33.3			189.5
75	1.6	9.0	267.5	67.6			345.7
80	1.1	5.6	340.7	150.4			497.7
85	0.2	5.5	397.5	141.1			544.3
90		2.3	361.0	170.8			534.1
95		1.9	199.1	122.4			323.4
100			80.9	25.5			106.4
105			13.2	2.0			15.3
110			0.3				0.3
115							
120							
SUM	28.3	245.6	2420.3	757.9			3452.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. ASCENT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.4	16.3	31.2				50.9
40	0.4	7.6	32.8	2.9			43.7
60		2.5	24.3	2.1			29.0
65		3.6	29.5	2.3			35.4
70		1.8	31.0	1.6			34.3
75		0.4	33.2	4.0			37.7
80		0.3	37.5	1.7			39.5
85		0.7	30.3	5.5			36.4
90			26.1	6.2			32.3
95			15.4	1.6			17.0
100			4.9				4.9
105			0.1				0.1
110							
115							
120							
SUM	3.8	33.0	296.3	27.9			361.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. MANUVR							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS							
40			0.8				0.8
60			0.3				0.3
65			0.6				0.6
70			0.9				0.9
75			0.9				0.9
80			1.0				1.0
85			2.4				2.4
90			2.2				2.2
95			0.8				0.8
100							
105							
110							
115							
120							
SUM			9.8				9.8

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.8	10.9	19.0				31.8
40	0.4	5.6	12.0				18.0
60	0.1	0.9	4.1				5.1
65	0.1	2.2	6.5	0.7			9.5
70	0.1	2.1	9.4	0.1			11.7
75		3.3	13.6	0.6			17.4
80	0.1	1.8	25.9	1.3			29.1
85	0.6	1.0	36.1	4.2			42.0
90	0.3	0.2	41.7	8.4			50.6
95	0.1	0.1	36.9	5.3			42.4
100	0.1	0.5	12.2	1.3			14.1
105		0.5	1.6	0.3			2.3
110		0.3	0.2				0.5
115		0.2					0.2
120							
SUM	3.8	29.5	219.3	22.3			274.8

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.0	15.1	28.0				44.1
40				0.7			0.7
60			1.5	3.4			4.8
65			12.5	4.1			16.6
70		0.2	4.8	2.0			6.9
75		1.1	20.8	2.6			24.6
80		0.1	55.8	14.7			70.7
85		0.3	81.9	33.5			115.7
90			104.9	46.5			151.4
95			66.4	33.2			99.6
100		0.4	24.5	18.7			43.6
105		0.7	0.3				1.1
110							
115							
120							
SUM	1.0	18.0	401.4	159.4			579.8

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 27000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	6.2	42.4	78.2				126.8
40	0.8	13.2	45.6	3.6			63.2
60	0.1	3.4	30.2	5.5			39.3
65	0.1	5.7	49.1	7.1			62.0
70	0.1	4.0	46.0	3.7			53.8
75		4.8	68.5	7.3			80.6
80	0.1	2.2	120.2	17.7			140.2
85	0.6	2.0	150.7	43.1			196.5
90	0.3	0.2	174.9	61.1			236.5
95	0.1	0.1	119.5	40.1			159.8
100	0.1	0.9	41.6	20.1			62.6
105		1.2	2.0	0.3			3.4
110		0.3	0.2				0.5
115		0.2					0.2
120							
SUM	8.5	80.5	926.7	209.6			1225.4

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 29000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS		2.4	1.8				4.2
40		0.7	2.1	0.8			3.6
60		0.3	3.8	0.6			4.7
65		0.3	3.4	0.2			3.9
70		0.5	4.6	1.0			6.0
75		0.3	3.4	1.0			4.6
80		0.2	4.7	1.0			5.9
85		0.4	6.5	1.1			8.0
90			7.8	1.6			9.4
95			4.2	2.0			6.1
100			1.8				1.8
105							
110							
115							
120							
SUM		5.0	44.1	9.2			58.4

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 29000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.4	4.0	6.7				11.1
40	0.1	0.8	0.7				1.6
60		0.3	0.4				0.8
65		0.1	0.9	0.3			1.2
70			1.0				1.0
75		0.1	2.5	0.3			2.9
80			3.1	0.6			3.7
85		0.1	6.8	0.7			7.5
90		0.1	8.4	2.2			10.6
95			2.2	1.9			4.0
100			0.7	2.8			3.5
105			0.5				0.5
110							
115							
120							
SUM	0.4	5.4	33.9	8.7			48.4

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 29000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.7	10.7	12.2				24.6
40							
60							
65							
70							
75							
80			0.1	0.3			0.3
85			2.2	1.4			3.6
90			19.1	15.2			34.3
95			8.9	3.4			12.3
100			5.7				5.7
105							
110							
115							
120							
SUM	1.7	10.7	48.2	20.2			80.9



TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 29000, BY MISSION SEC. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.1	17.1	20.7				40.0
40	0.1	1.5	2.9	0.8			5.2
60		0.6	4.2	0.6			5.5
65		0.3	4.3	0.5			5.1
70		0.5	5.6	1.0			7.0
75		0.3	5.9	1.3			7.5
80		0.2	7.9	1.8			9.9
85		0.5	15.5	3.1			19.1
90		0.1	35.3	19.0			54.4
95			15.2	7.3			22.5
100			8.2	2.8			11.1
105			0.5				0.5
110							
115							
120							
SUM	2.1	21.1	126.2	38.2			187.6

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEC. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.1	1.0	3.5				4.5
40			9.9	1.7			11.6
60			2.9	0.6			3.6
65			0.2	0.3			0.5
70			0.6	1.3			1.9
75			0.8	1.5			2.2
80							
85							
90							
95							
100							
105							
110							
115							
120							
SUM	0.1	1.0	17.9	5.3			24.3

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEC. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.0	5.5	12.5				18.1
40		0.6	9.6	0.4			10.6
60			5.7	0.4			6.1
65			1.8				1.8
70			1.4	0.3			1.8
75			0.4	2.7			3.0
80			1.1	0.5			1.6
85			0.7	0.2			0.8
90			0.1				0.1
95							
100							
105							
110							
115							
120							
SUM	0.0	6.1	33.4	4.4			44.0

TABLE XL - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.3	11.1	33.4				45.8
40			3.3	2.7			6.0
60			11.0				11.0
65				0.8			0.8
70				5.0			5.0
75				2.9			2.9
80							
85							
90							
95							
100							
105							
110							
115							
120							
SUM	1.3	11.1	47.7	11.4			71.4

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 31000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.4	17.6	49.4				68.4
40		0.6	22.8	4.8			28.2
60			19.6	1.0			20.6
65			2.1	1.1			3.1
70			2.0	6.6			8.6
75			1.1	7.0			8.2
80			1.1	0.5			1.6
85			0.7	0.2			0.8
90			0.1				0.1
95							
100							
105							
110							
115							
120							
SUM	1.4	18.2	99.0	21.1			139.7

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 33000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.1	0.6	4.5				5.3
40			11.8				11.8
60			2.0				2.0
65			2.7				2.7
70			5.6				5.6
75			4.0				4.0
80			0.3				0.3
85							
90							
95							
100							
105							
110							
115							
120							
SUM	0.1	0.6	30.9				31.6

TABLE XL - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 33000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS		4.2	9.3				13.4
40		0.3	22.4				22.7
60			3.5				3.5
65			6.4				6.4
70			14.6				14.6
75			6.7				6.7
80			2.7				2.7
85			1.0				1.0
90			0.1				0.1
95							
100							
105							
110							
115							
120							
SUM		4.4	66.6				71.1

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 33000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.0	12.9	19.0				32.9
40			5.4				5.4
60			2.1				2.1
65			14.4				14.4
70			17.4				17.4
75			10.4				10.4
80			4.2				4.2
85			0.3				0.3
90							
95							
100							
105							
110							
115							
120							
SUM	1.0	12.9	73.1				87.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 33000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.1	17.7	32.8				51.5
40		0.3	39.6				39.9
60			7.6				7.6
65			23.4				23.4
70			37.6				37.6
75			21.0				21.0
80			7.3				7.3
85			1.3				1.3
90			0.1				0.1
95							
100							
105							
110							
115							
120							
SUM	1.1	18.0	170.6				189.7

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 35000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS		0.8	12.4				13.1
40		0.8	17.3				18.1
60			9.8				9.8
65			9.2				9.2
70			2.9				2.9
75			1.9				1.9
80			0.6				0.6
85							
90			0.1				0.1
95							
100							
105							
110							
115							
120							
SUM		1.6	54.2				55.8

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 35000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.8	1.8	16.5				19.0
40	0.1	0.7	17.1				17.9
60	0.1	0.4	15.9	0.7			17.1
65	0.1	0.5	15.3	0.4			16.3
70		1.8	16.7	0.5			19.1
75		0.3	12.1	0.3			12.7
80		0.8	4.3				5.0
85			2.5				2.5
90			0.2				0.2
95							
100							
105							
110							
115							
120							
SUM	0.9	6.3	100.7	1.9			109.8

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 35000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS		4.2	5.6				9.7
40			10.3				10.3
60			2.2				2.2
65			30.3	1.6			31.9
70			27.0	0.2			27.2
75			12.0				12.0
80			1.3				1.3
85			0.4				0.4
90							
95							
100							
105							
110							
115							
120							
SUM		4.2	89.0	1.8			95.0

TABLE XL - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 35000, BY MISSION SEG.							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.8	6.7	34.4				41.9
40	0.1	1.5	44.7				46.3
60	0.1	0.4	27.9	0.7			29.1
65	0.1	0.5	54.9	2.0			57.4
70		1.8	46.6	0.7			49.1
75		0.3	26.0	0.3			26.6
80		0.8	6.2				6.9
85			2.9				2.9
90			0.3				0.3
95							
100							
105							
110							
115							
120							
SUM	0.9	12.0	243.9	3.7			260.5

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 36000, BY MISSION SEG. ASCENT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.9	1.9	15.9				19.7
40		0.9	24.7				25.6
60		0.8	12.9	0.9			14.7
65		0.2	16.7	8.1			25.0
70			14.2	2.7			16.9
75			8.5	0.3			8.8
80			1.4	0.9			2.3
85			0.4				0.4
90			1.5	0.6			2.0
95			0.2	0.4			0.6
100							
105							
110							
115							
120							
SUM	1.9	3.9	96.3	13.9			116.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 36000, BY MISSION SEG. DESCNT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS		5.9	14.2				20.1
40		4.9	39.8	3.9			48.6
60		1.2	26.6	2.8			30.6
65		0.5	21.6	1.7			23.8
70		1.2	21.8	4.2			27.2
75		0.2	13.7	0.9			14.8
80		0.2	8.6	2.3			11.0
85		0.2	9.5	3.7			13.3
90			5.2	2.7			7.9
95			1.7	0.9			2.6
100							
105							
110							
115							
120							
SUM		14.3	162.6	23.1			200.0

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 36000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.4	5.7	9.4				15.5
40			19.5	2.1			21.6
60			18.8	0.3			19.1
65			33.3	4.6			37.9
70			31.1	8.1			39.2
75			25.5	5.7			31.2
80			1.7	8.9			10.6
85				11.1			11.1
90				8.5			8.5
95							
100							
105							
110							
115							
120							
SUM	0.4	5.7	139.3	49.3			194.7

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 36000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.3	13.5	39.5				55.2
40		5.8	84.0	6.0			95.9
60		2.0	58.3	4.1			64.3
65		0.7	71.6	14.4			86.7
70		1.2	67.1	14.9			83.3
75		0.2	47.7	6.9			54.8
80		0.2	11.7	12.1			23.9
85		0.2	9.8	14.8			24.8
90			6.7	11.8			18.4
95			1.9	1.3			3.2
100							
105							
110							
115							
120							
SUM	2.3	23.8	398.2	86.3			510.6

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 37000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.3	8.1	22.4				30.7
40		2.3	42.0	15.6			59.9
60		1.6	37.0	5.3			43.9
65		1.7	41.5	1.3			44.6
70		1.6	21.0	3.0			25.6
75		1.3	16.7	3.2			21.2
80		0.2	10.3	0.2			10.6
85			3.0	0.1			3.1
90			0.1				0.1
95							
100							
105							
110							
115							
120							
SUM	0.3	16.8	194.0	28.7			239.9

TABLE XL - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 37000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.4	15.6	29.6				45.6
40		5.4	58.6	4.5			68.5
60		1.2	33.9	4.1			39.2
65		0.3	46.2	0.9			47.4
70		0.1	44.7	0.4			45.2
75		0.4	19.8	3.4			23.6
80		0.4	16.8	1.2			18.4
85		0.2	3.4				3.6
90			2.5				2.5
95							
100							
105							
110							
115							
120							
SUM	0.4	23.6	255.6	14.5			294.1

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 37000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS		3.1	11.9				15.0
40			21.6	14.5			36.1
60			53.2				53.2
65			88.0	3.0			90.9
70			70.8	11.2			81.9
75			38.4	6.1			44.5
80			4.4	2.7			7.1
85			2.0	4.6			6.6
90				2.6			2.6
95							
100							
105							
110							
115							
120							
SUM		3.1	290.2	44.7			337.9

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 37000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.6	26.8	63.9				91.3
40		7.6	122.2	34.6			164.5
60		2.8	124.2	9.4			136.4
65		2.0	175.7	5.2			182.9
70		1.7	136.5	14.6			152.7
75		1.7	74.9	12.7			89.3
80		0.6	31.4	4.1			36.2
85		0.2	8.4	4.7			13.3
90			2.6	2.6			5.2
95							
100							
105							
110							
115							
120							
SUM	0.6	43.5	739.9	87.9			871.9

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 38000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.5	10.6	41.2				54.2
40	0.9	3.7	81.0	3.9			89.6
60		2.8	56.8	10.3			70.0
65		1.3	44.2	4.6			50.1
70		1.3	30.0	4.6			35.8
75		1.6	12.3	3.6			17.4
80			3.6	0.1			3.7
85			0.3				0.3
90							
95							
100							
105							
110							
115							
120							
SUM	3.4	21.3	269.3	27.1			321.1

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 38000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.9	15.5	27.7	0.1			44.2
40		7.4	43.6	2.4			53.5
60		0.8	43.1	3.2			47.1
65		0.5	41.4	2.6			44.5
70		0.2	37.4	5.6			43.2
75		0.1	26.3	10.0			36.4
80		0.1	11.3	1.1			12.5
85			5.9	0.4			6.3
90			1.0				1.0
95							
100							
105							
110							
115							
120							
SUM	0.9	24.5	237.9	25.4			288.7

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 38000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS		2.9	8.5				11.4
40			20.5	7.4			27.9
60			25.6	4.8			30.4
65			45.2	13.3			58.6
70			82.1	6.7			88.7
75			43.1	1.6			44.7
80			19.6	0.2			19.8
85			15.8	1.7			17.5
90							
95							
100							
105							
110							
115							
120							
SUM		2.9	260.4	35.7			299.1



TABLE XL - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 38000, BY MISSION SEG.							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.4	29.0	77.4	0.1			109.9
40	0.9	11.1	145.2	13.8			171.0
60		3.6	125.5	18.3			147.5
65		1.8	130.8	20.6			153.2
70		1.4	149.4	16.9			167.7
75		1.7	81.7	15.1			98.4
80		0.1	34.6	1.4			36.1
85			22.1	2.1			24.1
90			1.0				1.0
95							
100							
105							
110							
115							
120							
SUM	4.3	48.8	767.6	88.2			908.9

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 39000, BY MISSION SEG. ASCENT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.3	15.1	30.1				46.6
40	0.2	6.4	51.6	2.4			60.6
60	0.4	1.1	34.5	2.4			38.4
65		0.7	42.5	1.2			44.4
70		0.7	29.1	1.0			30.8
75		0.9	12.8	5.3			19.0
80		0.2	3.0	1.6			4.8
85			1.8				1.8
90							
95							
100							
105							
110							
115							
120							
SUM	1.9	25.2	205.4	13.9			246.5

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 39000, BY MISSION SEG. DESCNT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.5	8.4	18.7				27.5
40	0.3	5.8	44.4	0.8			51.2
60		1.1	31.4	0.6			33.2
65		0.1	35.8				35.9
70			46.5	0.8			47.3
75			20.8	5.0			25.8
80			6.0	2.1			8.1
85			3.8	1.6			5.4
90							
95							
100							
105							
110							
115							
120							
SUM	0.7	15.4	207.4	10.9			234.4

TABLE XL - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 39000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.5	0.4	13.0				13.8
40			37.6	5.3			43.0
60			79.2	0.6			79.9
65			90.7	3.1			93.8
70			72.5				72.5
75			39.5	0.6			40.1
80			27.0	2.6			29.5
85			15.1	0.3			15.4
90							
95							
100							
105							
110							
115							
120							
SUM	0.5	0.4	374.6	12.6			388.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 39000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.2	23.9	61.7				87.9
40	0.5	12.2	133.6	8.5			154.7
60	0.4	2.2	145.2	3.7			151.5
65		0.8	169.0	4.4			174.1
70		0.7	148.1	1.7			150.6
75		0.9	73.1	10.9			84.9
80		0.2	36.0	6.2			42.4
85			20.7	1.9			22.6
90							
95							
100							
105							
110							
115							
120							
SUM	3.1	40.9	787.4	37.4			868.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 40000, BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	2.7	28.8	55.5				87.0
40	0.3	10.5	119.1	2.6			132.6
60		2.2	74.0	3.2			79.4
65		1.5	60.0	1.8			63.3
70	0.2	0.7	36.0	0.1			37.0
75	0.4	0.3	14.7	1.2			16.6
80	0.7	0.1	3.5	0.5			4.7
85	0.1						0.1
90	0.4						0.4
95							
100							
105							
110							
115							
120							
SUM	4.8	44.1	362.9	9.4			421.2

TABLE XL - Continued

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 40000, BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.5	8.0	18.1				26.6
40		6.3	41.7	0.6			48.6
60		1.6	30.6	0.8			33.0
65		0.8	40.3	0.9			42.1
70			31.0	2.9			33.9
75			10.5	2.1			12.6
80			6.6				6.6
85			3.6				3.6
90			0.7				0.7
95							
100							
105							
110							
115							
120							
SUM	0.5	16.7	183.1	7.3			207.7

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 40000, BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.4	5.6	25.5				31.5
40			59.1	1.1			60.2
60			63.2	1.2			64.4
65			83.5	9.3			92.9
70			37.0	1.4			38.4
75			37.6	2.0			39.6
80			23.4	2.1			25.6
85			5.0	1.2			6.3
90							
95							
100							
105							
110							
115							
120							
SUM	0.4	5.6	334.4	18.4			358.8

## MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 40000, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.6	42.4	99.1				145.1
40	0.3	16.9	220.0	4.2			241.4
60		3.8	167.8	5.2			176.8
65		2.3	183.9	12.1			198.3
70	0.2	0.7	104.0	4.4			109.3
75	0.4	0.3	62.8	5.3			68.8
80	0.7	0.1	33.5	2.6			37.0
85	0.1		8.6	1.2			10.0
90	0.4		0.7				1.0
95							
100							
105							
110							
115							
120							
SUM	5.7	66.5	980.4	35.1			987.7

TABLE XL - Concluded

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT							SUM, BY MISSION SEG.	SUM
	LESS	1000	2000	5000	10000	15000	SUM	
LESS	62.6	505.7	1087.2	11.3			1666.8	
40	8.5	145.4	1162.3	93.1			1409.2	
60	1.4	42.3	856.4	58.6			958.7	
65	0.6	35.7	1053.9	92.5			1182.6	
70	0.6	33.8	998.3	111.2			1143.9	
75	2.3	30.8	886.9	189.8			1109.9	
80	2.1	22.8	883.1	295.0			1203.0	
85	0.9	14.8	973.6	337.1			1326.4	
90	0.7	9.2	901.2	400.2			1311.3	
95	0.1	6.1	553.9	238.0			798.1	
100	0.1	1.3	203.8	69.7			274.9	
105		1.2	28.5	7.8			37.5	
110		0.3	0.8	2.4			3.5	
115		0.2					0.2	
120								
SUM	79.8	849.6	9589.8	1906.8			12426.0	

TABLE XLI. TIME FOR CYCLIC STEADY VERSUS COLLECTIVE STEADY BY MISSION SEGMENT, SAMPLE II

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG ASCENT												
	LESS	10	20	30	40	50	60	70	80	90	SUM	
LESS												
10												
20												
30												
40							1111.6	2065.1			3176.7	
50							143.5				143.5	
60												
70												
80												
90												
SUM							1255.2	2065.1			3320.2	

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG MANUVR												
	LESS	10	20	30	40	50	60	70	80	90	SUM	
LESS												
10												
20												
30												
40							2.5	19.6			22.1	
50												
60												
70												
80												
90												
SUM							2.5	19.6			22.1	

TABLE XLI - Concluded

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG DESCNT

	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
1C											
20											
3C											
4C							1346.4	2590.8			3937.2
5C							151.6				151.6
6C											
7C											
8C											
9C											
SUM						1498.0	2590.8				4088.8

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG STEADY

	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
1C											
20											
3C					8.2	26.3	5.4	2.0	0.2		42.1
4C				10.2	434.8	696.3	220.0	117.8	18.8	3.8	1501.6
5C				27.8	934.3	1207.1	133.6	128.5	6.5	0.1	2437.9
6C			0.3	71.7	423.9	389.4	60.1	14.2	0.1		959.7
7C				33.3	8.3	5.0	4.1	2.7	0.1		53.4
8C											
9C											
SUM			0.3	143.0	1809.5	2324.0	423.1	265.3	25.7	3.9	4994.8

MINUTES FOR CYCLIC VS CCLL BY MISSION SEG SUM

	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
1C											
2C											
3C					8.2	26.3	5.4	2.0	0.2		42.1
4C				10.2	434.8	696.3	2680.6	4793.2	18.8	3.8	8637.6
5C				27.8	934.3	1207.1	428.7	128.5	6.5	0.1	2733.0
6C			0.3	71.7	423.9	389.4	60.1	14.2	0.1		959.7
7C				33.3	8.3	5.0	4.1	2.7	0.1		53.4
8C											
9C											
SUM			0.3	143.0	1609.5	2324.0	3178.8	4940.6	25.7	3.9	12425.9

TABLE XLII. TIME FOR  $C_T/\sigma$  VERSUS  $\mu$  BY RATE OF CLIMB AND MISSION SEGMENT, SAMPLE II

MINUTES FOR $C_T/S$ VS $\mu$		BY RATE OF CLIMB					LESS, BY MISSION SEG. DESCNT	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS								
0.0								
0.05	0.1						0.1	
0.10	0.1	0.1					0.2	
0.15	0.7	0.1					0.8	
0.20	2.3						2.3	
0.25	0.4						0.4	
0.30								
SUM	3.5	0.2					3.7	

MINUTES FOR $C_T/S$ VS $\mu$		BY RATE OF CLIMB					LESS, BY MISSION SEG.		SUM
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM		
LESS									
0.0									
0.05	0.1						0.1		
0.10	0.1	0.1					0.2		
0.15	0.7	0.1					0.8		
0.20	2.3						2.3		
0.25	0.4						0.4		
0.30									
SUM	3.5	0.2					3.7		

MINUTES FOR $C_T/S$ VS $\mu$		BY RATE OF CLIMB					-2100, BY MISSION SEG. DESCNT	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS								
0.0	0.1						0.1	
0.05	0.2						0.2	
0.10	1.2	0.4					1.6	
0.15	0.2	4.1	3.0				7.3	
0.20	0.0	12.3	0.2				12.5	
0.25		0.8					0.8	
0.30								
SUM	0.3	18.6	3.6				22.5	

MINUTES FOR $C_T/S$ VS $\mu$		BY RATE OF CLIMB					-2100, BY MISSION SEG.		SUM
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM		
LESS									
0.0	0.1						0.1		
0.05	0.2						0.2		
0.10	1.2	0.4					1.6		
0.15	0.2	4.1	3.0				7.3		
0.20	0.0	12.3	0.2				12.5		
0.25		0.8					0.8		
0.30									
SUM	0.3	18.6	3.6				22.5		

MINUTES FOR $C_T/S$ VS $\mu$		BY RATE OF CLIMB					-1800, BY MISSION SEG. MANUVR	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS								
0.0								
0.05								
0.10								
0.15								
0.20	0.1						0.1	
0.25								
0.30								
SUM	0.1						0.1	

TABLE XLII - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. DESCNT

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS								
0.0								
0.05		0.2	0.2					0.4
0.10		2.4	2.1					4.5
0.15	0.9	8.8	7.6					17.3
0.20	1.2	22.0	1.2					24.3
0.25		1.7						1.7
0.30								
SUM	2.1	35.1	11.1					48.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. SUM

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS								
0.0								
0.05		0.2	0.2					0.4
0.10		2.4	2.1					4.5
0.15	0.9	8.8	7.6					17.3
0.20	1.2	22.1	1.2					24.4
0.25		1.7						1.7
0.30								
SUM	2.1	35.2	11.1					48.3

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1500, BY MISSION SEG. DESCNT

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS		0.2	0.1					0.3
0.0	0.1							0.1
0.05		0.6	0.6					1.2
0.10	0.1	4.8	6.3					11.2
0.15	0.6	22.6	19.8					43.0
0.20	1.4	62.4	1.8					65.6
0.25	0.2	6.8						7.0
0.30								
SUM	2.3	97.4	28.5					129.3

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1500, BY MISSION SEG. SUM

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS		0.2	0.1					0.3
0.0	0.1							0.1
0.05		0.6	0.6					1.2
0.10	0.1	4.8	6.3					11.2
0.15	0.6	22.6	19.8					43.0
0.20	1.4	62.4	1.8					65.6
0.25	0.2	6.8						7.0
0.30								
SUM	2.3	97.4	28.5					128.3

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. ASCENT

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS								
0.0								
0.05			0.1					0.1
0.10			0.1					0.1
0.15								
0.20								
0.25								
0.30								
SUM			0.2					0.2

TABLE XLII - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1200, BY MISSION SEG. MANUVR					
	LESS	0.06	0.09	0.12	0.15	0.18	0.21 SUM
LESS							
C.C							
0.05							
0.10							
0.15		0.1					0.1
0.20		0.3					0.3
0.25							
0.30							
SUM		0.5					0.5

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1200, BY MISSION SEG. DESCNT					
	LESS	0.06	0.09	0.12	0.15	0.18	0.21 SUM
LESS	0.4	0.9	1.1				2.4
C.C		0.0	0.4				0.4
0.05		2.0	1.4				3.4
0.10	0.6	19.6	36.9				57.1
0.15	1.9	54.5	47.0				103.4
0.20	2.3	121.3	5.4				129.1
0.25	0.1	6.2					6.3
0.30							
SUM	5.4	204.6	92.2				302.1

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1200, BY MISSION SEG. STEADY					
	LESS	0.06	0.09	0.12	0.15	0.18	0.21 SUM
LESS		0.1					0.1
C.C		0.1	0.1				0.1
0.05							
0.10							
0.15							
0.20		0.1					0.1
0.25		0.1					0.1
0.30							
SUM		0.3	0.1				0.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1200, BY MISSION SEG. SUM					
	LESS	0.06	0.09	0.12	0.15	0.18	0.21 SUM
LESS	0.4	1.0	1.1				2.5
C.C		0.1	0.4				0.5
0.05		2.0	1.5				3.5
0.10	0.6	19.6	37.0				57.2
0.15	1.9	54.7	47.0				103.5
0.20	2.3	121.8	5.4				129.5
0.25	0.1	6.3					6.4
0.30							
SUM	5.4	205.4	92.4				303.2

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -900, BY MISSION SEG. ASCENT					
	LESS	0.06	0.09	0.12	0.15	0.18	0.21 SUM
LESS	0.1		0.9				0.9
C.C	0.1		0.1				0.1
0.05		0.1					0.1
0.10		0.1	0.3	0.1			0.5
0.15		0.4	0.7				1.1
0.20		0.9	0.1				1.0
0.25							
0.30							
SUM	0.1	1.6	2.1	0.1			3.9



TABLE XLII - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900, BY MISSION SEG. MANUVR

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS								
C.C								
0.05								
0.10								
0.15		0.5						0.5
0.20		0.2						0.2
C.25								
0.30								
SUM		0.7						0.7

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900, BY MISSION SEG. DESCNT

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.7	4.1	5.5					10.3
C.C	0.2	0.5	1.1					1.8
0.05	0.7	7.6	14.3					22.6
0.10	4.3	36.5	83.4					124.2
0.15	7.2	127.4	118.0					252.5
0.20	5.6	186.2	13.9					205.7
0.25		5.5						5.5
0.30								
SUM	18.6	367.8	236.2					622.6

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900, BY MISSION SEG. STEADY

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.3	1.9	0.6					2.8
C.C			0.1					0.1
0.05								
0.10			0.1					0.1
0.15		1.4	1.4					2.8
0.20		3.4						3.4
C.25								
0.30								
SUM	0.3	6.7	2.2					9.2

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -900, BY MISSION SEG. SUM

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	1.0	6.0	7.0					14.0
C.C	0.2	0.5	1.3					2.0
0.05	0.7	7.7	14.3					22.7
0.10	4.3	36.6	83.9	0.1				124.8
0.15	7.2	129.7	120.0					256.9
0.20	5.6	190.7	14.1					210.3
0.25		5.5						5.5
0.30								
SUM	19.0	376.8	240.5	0.1				636.4

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -600, BY MISSION SEG. ASCENT

	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.1	0.5	2.6					3.2
C.C		0.3	0.5					0.8
0.05		0.7	0.1					0.7
0.10		1.0	3.6					4.7
0.15	0.5	3.9	2.5					6.8
0.20		8.4	0.3					8.7
0.25		0.2						0.2
0.30								
SUM	0.6	15.0	9.5					25.1

TABLE XLII - Continued

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-600, BY MISSION SEG. MANUVR
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS								
C.0								
C.05								
C.10		0.1						0.1
C.15		0.9						0.9
C.20		0.8						0.8
C.25								
C.30								
SUM		1.8						1.8

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-600, BY MISSION SEG. DESCNT
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	2.2	19.9	12.3					34.4
C.0	4.1	12.1	7.6					20.7
C.05	5.8	42.4	45.0					93.2
C.10	12.3	84.7	131.5					228.6
C.15	9.2	182.0	184.0	2.4				377.6
C.20	7.0	312.6	16.4					336.0
C.25	0.5	5.6						6.1
C.30								
SUM	38.1	659.2	396.8	2.4				1096.5

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-600, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.3	5.5	2.0					7.8
C.0	0.3	0.5	0.2					1.0
C.05		0.1	0.4					0.5
C.10		0.8	3.0					3.8
C.15	0.2	11.9	10.7	0.4				23.2
C.20	0.2	32.7	0.7					33.6
C.25		0.1						0.1
C.30								
SUM	1.0	51.5	17.1	0.4				70.0

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-600, BY MISSION SEG. SUM
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	2.6	25.9	16.9					45.4
C.0	4.3	12.9	5.3					22.5
C.05	5.8	43.2	45.5					94.4
C.10	12.3	86.6	138.2					237.1
C.15	9.9	198.6	197.2	2.8				408.5
C.20	7.2	354.4	17.5					379.1
C.25	0.5	5.9						6.4
C.30								
SUM	39.6	727.5	423.4	2.8				1193.4

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB				-300, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	3.8	44.4	115.3					163.5
C.0	0.7	10.7	11.7					23.2
C.05	1.5	15.1	15.9					32.5
C.10	1.7	37.8	154.9	0.2				194.6
C.15	4.2	201.5	316.3					522.0
C.20	0.6	366.8	9.0					376.4
C.25		1.4						1.4
C.30								
SUM	12.5	677.7	623.3	0.2				1313.7

TABLE XLII - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300, BY MISSION SEG. MANUVR								
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS								
C.C								
C.05								
C.10		0.2						0.2
0.15		3.5						3.5
0.20		13.4						13.4
0.25								
0.30								
SUM		17.0						17.0
MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300, BY MISSION SEG. DESCNT								
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	11.3	127.4	35.4					174.1
C.C	9.2	66.7	23.9					99.8
C.05	10.2	68.8	45.0					124.0
0.10	8.1	82.4	115.9					206.4
0.15	11.4	264.4	346.3					622.1
0.20	9.7	548.4	24.8					583.0
0.25	0.1	7.0						7.1
0.30								
SUM	59.9	1165.2	591.5					1816.6
MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300, BY MISSION SEG. STEADY								
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	23.1	408.9	71.7					503.7
C.C	3.6	37.2	4.4					45.1
0.05		12.8	20.7					33.5
0.10		38.5	305.5	0.2				344.2
0.15	2.6	631.2	1200.2	5.5				1639.5
0.20	10.9	1942.3	91.2					2044.5
0.25		14.5						14.5
0.30								
SUM	40.2	3085.4	1693.7	5.6				4825.0
MINUTES FOR CT/S VS MU BY RATE OF CLIMB -300, BY MISSION SEG. SUM								
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	38.3	580.6	222.4					841.3
C.C	13.5	114.6	40.1					168.2
0.05	11.6	96.7	81.6					190.0
0.10	9.8	158.9	576.4	0.4				745.4
0.15	10.2	1100.5	1862.9	5.5				2987.1
0.20	21.2	2870.9	125.1					3017.2
0.25	0.1	22.9						23.0
0.30								
SUM	112.7	4945.2	2908.5	5.8				7972.2
MINUTES FOR CT/S VS MU BY RATE OF CLIMB 300, BY MISSION SEG. ASCENT								
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	2.0	35.0	29.6					66.6
C.C	0.6	10.6	8.8					20.0
C.05	0.9	17.4	32.4					50.7
0.10	1.7	35.3	165.3	0.5				205.9
0.15	1.7	154.4	187.9					343.9
0.20	1.6	127.0	3.7					132.3
0.25		0.9						0.9
0.30								
SUM	8.3	380.7	430.7	0.5				820.3

TABLE XLII - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			300, BY MISSION SEG. MANUVR	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS							
C.C							
C.05							
0.10	0.1						0.1
0.15	0.1						0.1
0.20	1.0						1.0
0.25							
0.30							
SUM	1.1						1.1

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			300, BY MISSION SEG. DESCNT	
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.3	2.6	2.0					5.0
C.C	0.3	0.0	1.1					2.2
0.05	0.2	0.7	0.3					1.2
0.10	0.3	0.8	3.1					4.1
0.15	0.3	8.3	6.7					15.4
0.20	0.3	12.3	0.1					12.6
0.25		0.5						0.5
0.30								
SUM	1.7	25.9	13.4					41.0

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			300, BY MISSION SEG. STEADY	
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.3	4.3	1.4					6.0
0.0		0.1	0.2					0.3
0.05			0.2					0.2
0.10		0.5	4.2					4.7
0.15	0.3	15.2	14.6					30.0
0.20	0.3	36.3	0.8					37.4
0.25		0.3						0.3
0.30								
SUM	0.9	56.6	21.3					78.8

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				300, BY MISSION SEG.		SUM
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	2.6	42.0	33.0					77.6
C.C	0.9	11.5	13.1					22.4
0.05	1.1	18.1	32.9					52.0
0.10	2.0	36.7	175.6	0.5				214.8
0.15	2.3	178.0	209.2					389.4
0.20	2.1	176.5	4.6					183.2
0.25		1.7						1.7
0.30								
SUM	10.9	464.4	465.4	0.5				941.2

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB			600, BY MISSION SEG. ASCENT	
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	1.0	20.7	7.6					29.3
C.C	0.4	7.3	4.1					11.8
0.05	0.5	13.9	22.4					36.8
0.10	0.7	55.6	129.2					185.6
C.15	3.4	153.8	84.0					241.2
C.20	0.5	46.5	0.4					47.4
0.25		0.3						0.3
0.30								
SUM	6.6	298.1	247.7					552.4

TABLE XLII - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					600, BY MISSION SEG. MANUVR	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS								
G.C								
0.05							0.3	
0.10	0.3						0.3	
0.15	0.3						0.2	
0.20	0.2							
0.25								
0.30							0.9	
SUM	0.9							
MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					600, BY MISSION SEG. DESCNT	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS	0.9	0.7					1.6	
G.C	0.0	0.1	0.1				0.2	
0.05	0.0						0.0	
0.10	0.1	0.2	0.6				0.9	
0.15		2.2	0.7				2.9	
0.20	0.1	1.0					1.1	
0.25		0.2					0.2	
0.30								
SUM	0.3	4.5	2.1				6.9	
MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					600, BY MISSION SEG. STEADY	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS	0.4	0.9	0.4				1.6	
G.C		0.1					0.1	
0.05								
0.10		0.1	0.5				0.6	
0.15		1.9	2.1				4.0	
0.20	0.1	5.0					5.1	
0.25								
0.30								
SUM	0.5	8.0	3.0				11.4	
MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					600, BY MISSION SEG.	SUM
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS	1.4	22.5	8.7				32.5	
G.C	0.4	7.5	4.2				12.1	
0.05	0.6	13.9	22.4				36.8	
0.10	0.8	56.2	130.3				187.3	
0.15	3.4	158.2	86.8				248.4	
0.20	0.7	52.8	0.4				53.9	
0.25		0.5					0.5	
0.30								
SUM	.3	311.5	252.8				571.6	
MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					900, BY MISSION SEG. ASCENT	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS	1.0	8.1	1.3				10.3	
G.C	0.1	3.8	0.6				4.6	
0.05	0.8	12.3	3.5				16.6	
0.10	0.4	59.2	47.0				106.6	
0.15	0.7	115.1	36.2				152.1	
0.20	0.1	19.1	1.1				20.3	
0.25	0.1						0.1	
0.30								
SUM	3.1	217.6	89.8				310.6	

TABLE XLII - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					900, BY MISSION SEG. MANUVR	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS								
0.0								
0.05								
0.10	0.1						0.1	
0.15								
0.20								
0.25								
0.30								
SUM	0.1						0.1	
MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					900, BY MISSION SEG. DESCNT	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS		0.1					0.1	
0.0								
0.05								
0.10		0.1					0.1	
0.15								
0.20								
0.25								
0.30								
SUM		0.2					0.2	
MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					900, BY MISSION SEG. SUM	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS	1.0	8.1	1.4				10.4	
0.0	0.1	3.8	0.6				4.6	
0.05	0.8	12.3	3.6				16.6	
0.10	0.4	59.3	47.1				106.8	
0.15	0.7	115.1	36.2				152.1	
0.20	0.1	19.1	1.1				20.3	
0.25	0.1						0.1	
0.30								
SUM	3.1	217.7	90.1				310.9	
MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					1200, BY MISSION SEG. ASCENT	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS	0.8	3.6	0.4				4.8	
0.0		2.0	0.1				2.1	
0.05	0.7	9.0	2.4				12.0	
0.10	1.4	49.8	7.9				61.0	
0.15	1.5	59.5	5.6				66.5	
0.20		5.0					5.0	
0.25								
0.30								
SUM	4.3	128.9	16.3				151.5	
MINUTES FOR CT/S VS MU		BY RATE OF CLIMB					1200, BY MISSION SEG. DESCNT	
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM	
LESS								
0.0								
0.05								
0.10								
0.15								
0.20	0.1						0.1	
0.25								
0.30								
SUM	0.1						0.1	

TABLE XLII - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1200, BY MISSION SEG.	SUM
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS 0.8	3.6	0.4					4.8
0.0	2.0	0.1					2.1
0.05	0.7	9.0	2.4				12.0
0.10	4.4	49.3	9.9				61.0
0.15	1.5	59.5	3.6				66.5
0.20		5.1					5.1
0.25							
0.30							
SUM	4.3	129.0	18.3				151.5

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1500, BY MISSION SEG. ASCENT	SUM
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS 0.4	3.5						3.9
0.0	0.2	1.5					1.7
0.05	0.9	9.0	0.1				10.0
0.10	1.7	35.0	1.5				38.3
0.15	1.0	26.6	1.3				28.9
0.20	0.2	1.9					2.1
0.25		0.0					0.0
0.30							
SUM	4.4	77.6	3.0				84.9

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1500, BY MISSION SEG.	SUM
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS 0.4	3.5						3.9
0.0	0.2	1.5					1.7
0.05	0.9	9.0	0.1				10.0
0.10	1.7	35.0	1.5				38.3
0.15	1.0	26.6	1.3				28.9
0.20	0.2	1.9					2.1
0.25		0.0					0.0
0.30							
SUM	4.4	77.6	3.0				84.9

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1800, BY MISSION SEG. ASCENT	SUM
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS 0.2	1.1	0.1					1.5
0.0	0.8						0.8
0.05	0.4	3.7	0.1				4.3
0.10	0.5	17.0	0.8				18.3
0.15	0.3	13.8	0.1				14.2
0.20	0.1	1.1					1.2
0.25							
0.30							
SUM	1.5	37.6	1.1				40.2

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1800, BY MISSION SEG.	SUM
LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS 0.2	1.1	0.1					1.5
0.0	0.8						0.8
0.05	0.4	3.7	0.1				4.3
0.10	0.5	17.0	0.8				18.3
0.15	0.3	13.8	0.1				14.2
0.20	0.1	1.1					1.2
0.25							
0.30							
SUM	1.5	37.6	1.1				40.2

TABLE XLII - Concluded

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB				2100, BY MISSION SEG. ASCENT	
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.3	0.6						0.9
G.C		0.2						0.2
0.05	0.1	1.8						1.8
0.10	0.8	8.5						9.3
0.15		5.0						5.0
0.20		0.3						0.3
0.25								
0.30								
SUM	1.1	16.5						17.6

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				2100, BY MISSION SEG.		SUM
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	0.3	0.6						0.9
0.0		0.2						0.2
0.05	0.1	1.8						1.8
0.10	0.8	8.5						9.3
0.15		5.0						5.0
0.20		0.3						0.3
0.25								
0.30								
SUM	1.1	16.5						17.6

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				SUM, BY MISSION SEG.		SUM
	LESS	0.06	0.09	0.12	0.15	0.18	0.21	SUM
LESS	48.9	695.2	291.0					1035.1
0.0	16.8	155.5	65.0					237.3
0.05	22.6	218.5	205.0					446.1
0.10	34.7	572.7	1209.6	1.0				1817.9
0.15	48.0	2075.8	2596.6	8.3				4728.8
0.20	42.1	3893.8	174.3					4107.2
0.25	0.9	52.6						53.5
0.30								
SUM	214.0	7664.1	4536.6	9.3				12426.0



TABLE XLIII. TIME FOR ENGINE TORQUE VERSUS AIRSPEED BY WEIGHT AND ALTITUDE, SAMPLE II

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 21000,														BY ALTITUDE LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40			0.3		0.6		0.5							1.3	
60				0.4										0.4	
65															
70															
75															
80															
85															
90															
95															
100															
105															
110															
115															
120															
SUM			0.3	0.4	0.6		0.5							1.7	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 21000,														BY ALTITUDE LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40		0.3	0.3	0.2	0.1		0.5							1.3	
60		0.4												0.4	
65															
70															
75															
80															
85															
90															
95															
100															
105															
110															
115															
120															
SUM		0.6	0.3	0.2	0.1		0.5							1.7	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 21000,														BY ALTITUDE 1000	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	1.2	1.0	2.9	4.8	1.2									12.3	
60	1.2	0.4	0.6	1.5	0.7	0.6	0.1	0.4						4.3	
65	0.4	0.4	0.5	0.4	0.2									1.8	
65	0.3	0.9		0.0	0.3									1.5	
70	0.1	0.2	0.4	0.6	0.1									1.4	
75		0.2	0.1	0.4	0.2									0.8	
80		0.4	0.1	0.6	0.1	0.2								1.4	
85		0.1	0.1		0.1	0.1								0.4	
90			0.3		0.1									0.4	
95															
100															
105															
110															
115															
120															
SUM	3.3	3.5	4.9	8.4	2.9	0.9	0.1	0.4						24.4	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 21000,														BY ALTITUDE 1000	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	0.3	0.8	4.7	4.2	2.2		0.1							12.3	
60	0.7	0.9	1.2	1.0	0.5									4.3	
65	0.6	0.2	0.1	0.9										1.8	
65	0.2	0.3	0.0	1.0										1.5	
70	0.1	0.6	0.0	0.8										1.4	
75	0.1		0.2	0.6										0.8	
80	0.1	0.1	0.7	0.6										1.4	
85		0.1	0.2	0.1										0.4	
90	0.1	0.3												0.4	
95															
100															
105															
110															
115															
120															
SUM	2.1	3.2	7.2	9.1	2.6		0.1							24.4	

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 21000,														BY ALTITUDE 2000	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	3.4	1.8	3.0	10.7	11.2	2.1	0.4	0.1						32.7	
40	6.4	0.8	0.9	6.3	2.4	0.2	1.0							18.0	
60	1.3	0.5	0.6	1.0	0.4	0.2								4.0	
65	2.2	0.6	0.8	1.5	1.8	0.7								7.7	
70	2.9	1.1	1.5	2.1	2.6	2.0								12.3	
75	3.9	2.4	1.6	2.4	4.4									14.6	
80	2.7	1.7	4.5	7.1	4.7									20.8	
85	2.2	1.4	4.9	9.8	10.9	0.4								29.6	
90	2.3	2.2	4.3	9.7	6.4									25.0	
95	0.7	1.7	3.7	12.0	2.0									20.1	
100		0.4		2.0	9.7	1.7								13.8	
105			1.0	0.6										1.6	
110															
115															
120															
SUM	28.2	14.8	28.8	72.8	48.5	5.6	1.4	0.1						200.1	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 21000,														BY ALTITUDE 2000	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS	1.8	1.1	3.9	17.4	7.0	1.0		0.4	0.1					32.7	
40	1.8	1.7	4.5	5.7	1.0	3.2								18.0	
60	0.3	0.1	1.0	1.3	0.6	0.6								4.0	
65	0.1	0.6	1.2	3.9	1.4	0.3								7.7	
70	0.6	1.5	1.4	8.1	0.8	0.0								12.3	
75	0.3	0.4	1.8	8.4	3.1	0.6								14.6	
80	0.7	0.2	3.1	11.0	5.4	0.4								20.8	
85	0.4	0.2	2.4	13.1	13.6									29.6	
90	0.6	0.6	2.9	7.6	13.3									25.0	
95	0.8	0.2	1.7	8.2	9.2									20.1	
100	0.4	1.4	2.1	4.6	5.4									13.8	
105		0.1	0.8	0.4	0.3									1.6	
110															
115															
120															
SUM	7.8	8.1	26.8	89.7	61.2	6.0	0.4	0.1						200.1	
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 21000,														BY ALTITUDE 5000	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS					0.9	0.8								1.6	
40					0.6									0.6	
60														0.3	
65				0.3										0.1	
70					0.1									1.7	
75		0.2	0.2	0.6	0.8									2.4	
80		0.3	0.9	1.1	0.1									3.3	
85	0.5	1.4	0.5	0.8										3.6	
90	0.4	0.4	1.1	1.5	0.2									3.7	
95			0.1	1.9	1.7									1.0	
100				0.5	0.4									0.2	
105					0.2										
110															
115															
120															
SUM	0.9	2.3	2.8	6.8	5.0	0.8								18.6	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 21000,														BY ALTITUDE 5000	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS					0.9	0.8								1.6	
40					0.4	0.2								0.6	
60														0.3	
65				0.3										0.1	
70						0.1								1.7	
75						0.8								2.4	
80			0.2	1.7	0.4	0.1								3.3	
85			0.3	2.4	0.6									3.6	
90			1.3	2.3	0.1									3.7	
95			0.5	1.5	1.6	0.1								1.0	
100			0.3	0.2	0.4									0.2	
105					0.2										
110															
115															
120															
SUM			2.6	9.4	4.6	2.0								18.6	

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 21000,										BY ALTITUDE					SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120		SUM	
LESS	4.7	2.8	6.1	15.5	13.0	2.7	1.0	0.5							46.3	
40	7.6	1.1	1.5	8.2	3.9	1.0	1.0								24.2	
60	1.7	0.9	1.1	1.3	1.2	0.2									6.4	
65	2.6	1.5	0.8	1.6	2.1	0.7									9.5	
70	3.0	1.3	1.9	2.7	2.8	2.0									13.8	
75	3.9	2.8	1.8	3.4	5.3										17.1	
80	2.7	2.5	5.5	8.8	4.9	0.2									24.6	
85	2.7	3.0	5.5	10.6	11.0	0.5									33.3	
90	2.7	2.6	5.8	11.3	6.7										29.0	
95	0.7	1.7	3.7	13.9	3.7										23.8	
100		0.4	2.0	10.2	2.1										14.8	
105			1.0	0.6	0.2										1.8	
110																
115																
120																
SUM	32.3	20.7	36.8	88.3	56.9	7.2	2.0	0.5							244.7	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 21000,										BY ALTITUDE					SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120		SUM	
LESS	2.1	2.2	8.9	21.8	9.3	1.0	1.0	0.1							46.3	
40	2.5	3.0	5.8	6.7	2.4	3.9									24.2	
60	1.0	0.4	1.1	2.2	1.0	0.8									6.4	
65	0.3	0.9	1.3	5.2	1.4	0.3									9.5	
70	0.6	2.0	1.4	8.8	0.8	0.1									13.8	
75	0.3	0.4	2.0	9.9	3.1	1.3									17.1	
80	0.7	0.3	4.0	13.3	5.8	0.5									24.6	
85	0.4	0.3	2.9	15.6	14.2										33.3	
90	0.7	0.9	4.1	9.9	13.4										29.0	
95	0.8	0.2	2.2	9.6	10.9	0.1									23.8	
100	0.4	1.4	2.4	4.8	5.8										14.8	
105		0.1	0.8	0.4	0.5										1.8	
110																
115																
120																
SUM	9.9	11.9	36.9	108.4	68.5	8.0	1.0	0.1							244.7	

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 23000,										BY ALTITUDE					LESS	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120		SUM	
LESS	0.2	0.4	1.1	3.2	5.5	2.3	0.9	0.2	0.1						13.8	
40	0.4	0.3	0.7	0.3	1.7	0.7	0.2								4.2	
60				0.5	0.1	0.2									0.8	
65		0.3			0.1	0.1									0.4	
70					0.1										0.1	
75			0.4												0.4	
80		0.3													0.3	
85																
90																
95																
100																
105																
110																
115																
120																
SUM	0.6	1.3	2.1	4.0	7.4	3.2	1.1	0.2	0.1						19.8	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 23000,										BY ALTITUDE					LESS	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120		SUM	
LESS	0.2	1.4	3.0	6.6	2.2	0.3									13.8	
40	0.2	1.4	0.9	1.0	0.8										4.2	
60		0.1	0.1	0.2	0.4										0.8	
65	0.1		0.2	0.2											0.4	
70			0.1												0.1	
75			0.4												0.4	
80				0.3											0.3	
85																
90																
95																
100																
105																
110																
115																
120																
SUM	0.5	2.9	4.5	8.3	3.4	0.3									19.8	

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 23000, BY ALTITUDE 1000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	5.4	8.1	11.0	18.7	21.2	8.9	4.3	1.6	0.8	0.3				80.2
40	7.8	2.9	2.9	3.8	7.5	2.3	1.5		0.7					29.3
60	1.7	0.4	0.9	2.4	1.9	0.6	0.4							8.4
65	1.8	0.5	0.9	2.7	1.5	0.9								8.2
70	0.7	1.2	0.7	3.4	3.3	1.1								10.3
75	1.5	0.2	1.2	3.5	2.7	1.4								10.5
80	0.7	0.5	2.6	5.1	2.0	0.4								11.2
85	1.3	0.3	1.0	2.1	0.8	0.6								6.0
90	0.6	0.3	0.7	1.6	2.5									5.7
95	0.2	0.4	0.2	3.1	0.2									4.1
100														
105														
110														
115														
120														
SUM	21.6	14.8	22.0	46.4	43.5	16.1	6.2	1.6	1.4	0.3				174.0
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 23000, BY ALTITUDE 1000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3	1.5	8.3	27.1	30.5	8.6	2.9	0.9						80.2
40	0.6	4.2	10.0	6.8	5.7	1.1	0.4	0.6						29.3
60		0.5	4.4	1.5	1.5	0.4	0.1							8.4
65	0.2	0.3	2.6	3.8	1.3	0.1	0.1							8.2
70	0.1	0.6	2.7	6.2	0.7	0.2								10.3
75	0.2	1.5	3.4	4.1	1.4	0.1								10.5
80	0.2	0.4	3.2	6.9	0.4	0.1								11.2
85	0.1	1.1	0.9	3.7		0.3								6.0
90	0.1		0.9	3.4	1.3									5.7
95			0.3	3.4	0.4									4.1
100														
105														
110														
115														
120														
SUM	1.6	10.1	36.5	66.9	43.1	10.8	3.5	1.5						174.0
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 23000, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	6.6	9.3	18.3	32.4	60.1	30.8	6.7	4.9	2.2	2.5	0.1			173.9
40	15.4	8.5	11.6	13.4	24.4	22.3	6.0	4.9	0.1					106.6
60	7.0	4.6	4.8	8.7	9.9	13.7	3.4	0.2						52.4
65	6.0	4.5	8.2	11.6	21.8	10.7	3.9	0.4						67.2
70	10.8	4.2	9.0	21.2	19.1	19.3	1.5							85.2
75	7.1	3.5	18.1	44.4	32.8	16.4	1.5							123.8
80	10.5	10.5	28.3	83.2	48.9	10.7	1.8							193.9
85	7.6	10.6	29.4	129.1	77.8	8.6	1.3							264.5
90	8.5	8.3	23.0	114.5	65.4	7.8	0.2							227.7
95	5.8	8.0	11.6	62.9	37.3	9.8								135.4
100	5.1	3.5	4.3	21.1	9.5	5.2								48.6
105	0.9	1.1	2.6	4.6	0.4	0.4								10.0
110				0.2	0.0									0.3
115														
120														
SUM	91.3	76.7	169.2	547.3	407.5	155.7	26.3	10.4	2.3	2.5	0.1			1489.4
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 23000, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	4.3	10.4	21.7	63.1	50.2	16.6	5.9	1.8						173.9
40	8.6	9.5	14.0	17.2	30.5	19.4	5.8	1.6						106.6
60	2.5	6.9	8.2	8.5	9.7	15.6	1.0							52.4
65	2.2	7.1	9.9	13.5	21.4	12.0	1.2							67.2
70	2.3	9.4	10.4	28.5	22.9	11.5	0.3							85.2
75	2.5	5.5	14.3	52.0	31.6	17.5	0.4							123.8
80	2.3	4.3	32.6	96.6	43.6	13.6	0.9							193.9
85	2.8	4.1	36.6	112.3	92.0	16.1	0.5							264.5
90	2.0	2.1	15.5	101.1	88.3	18.4	0.3							227.7
95	0.9	1.2	7.4	53.9	53.7	17.6	0.7							135.4
100	0.7	1.0	2.5	21.9	14.4	7.9	0.1							48.6
105	0.1	0.3	1.4	5.3	2.3	0.6								10.0
110				0.2	0.0									0.3
115														
120														
SUM	31.2	61.8	174.3	574.1	460.7	166.8	17.1	3.4						1489.4

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 23000, BY ALTITUDE 5000														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40			0.7	0.4	1.8	1.3								4.2
60	0.4		0.4		1.3	0.0								2.2
65	0.4		0.9	2.2	2.1	0.5	0.2							6.3
70			1.6	3.9	2.4	1.2	0.1							9.3
75	0.5	0.9	3.7	23.6	6.3	1.7								36.7
80	0.2	0.7	9.5	49.5	9.2	2.1								71.3
85	0.7	0.6	6.7	83.7	13.1	2.5								107.1
90	0.5	0.4	9.9	82.7	27.9	1.6								123.0
95		0.4	4.2	25.3	27.8	1.8								59.5
100	0.4	0.1	2.3	9.4	7.0	1.2								20.4
105		0.5	0.1	0.9	3.8									5.3
110					2.4									2.4
115														
120														
SUM	3.0	3.7	40.0	281.6	105.4	14.0	0.3							447.8

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 23000, BY ALTITUDE 5000														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40				0.8	2.5	0.4	0.5							4.2
60			0.4	0.5	0.5	0.7								2.2
65			0.4	2.2	2.1	1.7								6.3
70			1.3	3.7	2.7	1.4								9.3
75			4.0	18.0	12.6	1.4		0.4	0.3					36.7
80	0.5		10.8	31.8	24.2	3.0	0.1	0.8						71.3
85		0.4	3.9	75.3	21.8	3.9	0.4	1.4						107.1
90			8.2	67.4	37.3	8.7	1.0	0.5						123.0
95			4.1	19.4	19.0	13.7	3.2							59.5
100			1.0	7.2	7.7	3.6	0.9							20.4
105			0.2	0.8	2.5	1.7	0.0							5.3
110					2.4									2.4
115														
120														
SUM	0.5	0.4	34.3	227.2	135.5	40.3	6.2	3.1	0.4					447.8

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 23000, BY ALTITUDE SUM														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	12.1	17.8	30.3	54.3	86.8	42.0	11.9	6.7	3.0	2.8	0.1			268.0
60	23.6	11.7	15.8	17.9	35.4	26.5	7.7	4.9	0.8					144.3
65	9.1	5.0	6.0	11.7	13.2	14.6	3.9	0.2						63.7
70	8.2	5.3	10.1	16.5	25.5	12.1	4.1	0.4						82.2
75	11.5	5.5	11.3	28.5	24.8	21.6	1.6							104.8
80	9.1	4.6	23.4	71.5	41.8	19.4	1.5							171.3
85	11.4	12.0	40.3	137.9	60.1	13.2	1.8							276.7
90	9.6	11.6	37.1	214.8	91.7	11.7	1.3							377.7
95	9.6	9.1	33.6	198.8	95.8	9.4	0.2							356.4
100	6.0	8.8	16.1	91.2	65.4	11.6								199.0
105	5.5	3.6	6.5	30.6	16.5	6.4								69.0
110	0.9	1.6	2.7	5.5	4.2	0.4								15.3
115				0.2	2.4									2.7
120														
SUM	116.5	96.5	233.3	879.2	563.7	188.9	34.0	12.2	3.8	2.8	0.1			2131.0

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 23000, BY ALTITUDE SUM														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	4.8	13.3	33.0	96.8	83.1	25.5	8.8	2.7						268.0
60	9.4	15.0	24.8	25.8	39.4	20.9	6.8	2.2						144.3
65	2.5	7.5	13.2	10.8	12.1	16.7	1.0							63.7
70	2.4	7.4	12.9	19.6	24.8	13.8	1.3							82.2
75	2.3	9.9	14.4	38.4	26.3	13.1	0.3		0.1					104.8
80	2.6	7.0	22.0	74.0	45.6	18.9	0.4	0.4	0.3					171.3
85	2.9	4.7	46.6	135.6	48.2	16.7	1.0	0.8						276.7
90	3.0	5.6	41.3	191.3	113.8	20.4	0.9	1.4						377.7
95	2.1	2.1	24.6	171.9	126.9	27.1	1.3	0.5						356.4
100	0.9	1.2	11.8	76.7	73.1	31.3	3.9							199.0
105	0.7	1.0	3.6	29.1	22.1	11.5	1.0							69.0
110	0.1	0.3	1.6	6.1	4.8	2.3	0.0							15.3
115				0.2	2.4									2.7
120														
SUM	33.7	75.1	249.7	876.4	642.7	218.2	26.8	8.0	0.4					2131.0

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.1	0.2	0.6	2.2	10.5	6.8	1.8	1.0						23.0
60		0.6		0.2	0.3	0.2								1.4
70						0.2								0.2
75				0.2	1.3	0.1								1.6
80				0.3	0.8									1.1
85				0.1	0.1									0.2
90														
95														
100														
105														
110														
115														
120														
SUM	0.1	0.8	0.6	3.0	12.9	7.2	1.8	1.0						27.4
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.3	0.5	2.1	10.3	9.2	0.2		0.5						23.0
60			0.1	0.6	0.4									1.4
70					0.2									0.2
75			0.2	1.1	0.3									1.6
80			0.4	0.7										1.1
85				0.2										0.2
90														
95														
100														
105														
110														
115														
120														
SUM	0.5	0.5	2.8	12.8	10.1	0.2		0.5						27.4
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE 1000														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	4.6	7.4	11.8	32.8	38.7	22.2	2.8	1.7	0.4					122.5
60	8.5	4.1	2.6	1.7	7.8	2.4	1.4							28.5
65	3.3	0.6	2.5	0.3	2.3	0.2	0.3							9.5
70	1.3	1.1	1.7	1.6	2.1	1.4								9.5
75	1.0	1.6	3.1	2.3	0.6	0.2								8.8
80	0.4	1.8	1.0	2.7	0.6	0.3								6.7
85	0.1	0.2	0.9	2.3	0.6	0.5								4.5
90	0.5	0.5	0.3	1.5	0.5	0.8								4.0
95		0.6	0.7	0.6	0.1									2.1
100		0.1	1.2	0.2		0.4								1.9
105														
110														
115														
120														
SUM	19.7	18.0	25.8	45.9	53.3	28.3	4.7	1.7	0.4					197.9
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE 1000														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	1.8	3.4	18.3	41.3	40.7	15.3	1.4	0.3	0.1					122.5
60	1.1	4.0	7.6	8.5	4.7	2.4								28.5
65	0.4	1.3	2.2	4.0	1.0	0.6								9.5
70	0.4	0.9	2.9	2.5	1.3	1.5	0.1							9.5
75		0.6	3.8	3.4	0.8	0.1								8.8
80	0.3	0.1	2.4	3.0	0.7	0.1								6.7
85		0.1	1.0	2.9	0.1	0.3								4.5
90		0.4		3.0	0.3	0.4								4.0
95		0.2		1.7		0.1								2.1
100		0.5	0.5	0.5		0.4								1.9
105														
110														
115														
120														
SUM	4.0	11.6	38.7	70.9	49.6	21.2	1.5	0.3	0.1					197.9

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	6.7	9.4	17.1	66.1	86.4	37.1	15.8	6.0	4.6	0.2	0.1			249.4
40	15.5	9.6	14.4	18.5	26.8	28.0	13.7	1.9						128.5
60	7.4	2.0	9.9	11.2	13.3	14.2	5.8	1.3						65.0
65	5.9	4.1	7.9	17.9	25.4	19.1	4.1	0.9						85.2
70	6.8	4.1	16.3	20.4	28.9	25.9	2.4	0.7	C.3					105.8
75	8.3	11.6	29.4	67.0	51.9	24.4	1.4	0.6	0.3					194.8
80	11.5	11.3	34.8	133.9	61.2	9.6	0.8	0.1	0.2					263.4
85	5.2	7.4	37.6	174.5	85.1	7.1	1.7	0.0	C.2					318.9
90	5.9	4.5	25.8	136.7	78.8	9.5	0.7	0.2						262.1
95	3.3	3.5	13.8	62.8	57.1	7.7	0.4							148.5
100	1.7	2.6	6.6	29.7	27.5	4.4	0.2							72.7
105	0.5	0.1	3.1	4.2	2.4	0.3	0.3							10.9
110	0.2			0.1	0.0									0.3
115														
120														
SUM	78.9	70.2	216.5	743.0	544.8	187.2	47.4	11.6	5.3	0.2	0.1			1905.6
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	4.2	6.7	24.4	84.7	86.1	27.8	10.7	1.4	3.1	0.3				249.4
40	8.2	6.9	18.2	24.7	36.5	23.5	7.5	2.5	0.2	0.1				128.5
60	2.3	4.5	6.6	16.2	15.3	9.9	7.4	2.0	C.7	0.2				65.0
65	2.5	4.9	10.4	15.7	26.8	15.4	7.8	0.6	1.2					85.2
70	3.0	5.8	11.6	27.3	31.0	22.9	4.0	0.1	0.1					105.8
75	2.1	4.9	34.7	69.3	57.4	22.2	4.2							194.8
80	2.8	5.2	42.2	129.4	71.2	9.7	3.0							263.4
85	2.0	5.8	33.4	153.7	111.3	11.3	1.3							318.9
90	1.9	4.0	21.7	117.1	108.0	7.6	1.5							262.1
95	1.8	3.2	12.8	52.0	59.5	13.4	5.8							148.5
100	0.2	1.1	4.9	21.6	26.6	14.9	3.4							72.7
105		0.2	1.2	3.1	5.6	0.8								10.9
110				0.3	0.0									0.3
115														
120														
SUM	31.1	53.1	222.2	715.1	635.3	179.4	56.8	6.6	5.3	0.6				1905.6
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.1	0.6	1.6	4.4	4.4								11.0
40			1.6	0.8	2.2	3.9	2.0							10.5
60		0.9	0.5	0.5	1.8	1.5	0.2	0.2						5.5
65	0.3	0.6	0.2	7.7	5.6	1.7	0.5							16.4
70			1.4	13.9	11.9	1.9	0.1							29.2
75	0.1	1.1	4.1	32.9	11.9	0.3								50.4
80	0.1	0.9	3.0	65.7	28.2	1.4	0.1							99.4
85	0.8	1.8	10.4	79.6	29.1	1.9								123.6
90	0.7	1.5	6.3	68.5	49.2	0.6								126.7
95	1.3	0.7	2.4	34.8	34.1	21.6								94.8
100		0.4	2.5	3.3	14.7	2.2								23.2
105			0.4	0.5	0.3									1.3
110														
115														
120														
SUM	3.3	7.8	33.3	309.7	193.5	41.3	3.0	0.2						592.0
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 25000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.5	5.9	4.6									11.0
40			0.7	2.3	3.1	1.4	1.7	1.3						10.5
60			0.2	1.9	2.3	0.8	0.3							5.5
65			0.8	8.6	2.8	3.3	0.9							16.4
70			2.3	11.8	8.6	6.4								29.2
75		0.3	4.5	32.2	12.1	1.4								50.4
80		0.7	3.0	53.1	39.8	1.9	0.8							99.4
85		1.0	15.6	69.8	31.4	5.7	0.2							123.6
90	0.2	0.4	11.6	48.6	50.5	14.9	0.5							126.7
95		1.0	5.1	18.2	37.9	32.0	0.6							94.8
100		0.2	0.9	2.9	11.0	7.9	0.3							23.2
105			0.4	0.4	0.4									1.3
110														
115														
120														
SUM	0.2	3.6	45.6	255.7	204.6	75.7	5.4	1.3						592.0

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 25000,														BY ALTITUDE		SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM	
LESS	11.3	17.1	30.1	102.7	139.9	10.4	20.4	8.7	5.0	0.2	0.1					405.9	
40	24.1	14.3	18.6	21.2	37.1	10.5	17.1	1.9								168.8	
60	10.7	3.4	12.9	12.0	17.4	18.9	6.3	1.4								80.1	
65	7.5	5.8	9.7	27.2	33.1	11.2	4.8	0.9								111.2	
70	7.8	5.7	20.7	36.6	41.5	8.1	2.6	0.7	0.3							144.0	
75	8.9	14.4	34.5	102.7	65.7	25.0	1.4	0.6	0.3							253.4	
80	11.7	12.4	38.7	202.2	90.4	11.4	0.9	0.1	0.2							368.3	
85	6.5	9.7	48.3	255.6	114.4	9.8	1.7	0.0	0.2							446.7	
90	6.6	6.6	32.8	205.8	128.1	10.1	0.7	0.2								390.9	
95	4.6	4.3	17.3	97.8	91.2	29.6	0.4									245.2	
100	1.7	2.9	9.1	33.0	42.2	6.6	0.2									95.9	
105	0.5	0.1	3.5	4.7	2.7	0.3	0.3									12.1	
110	0.2			0.1	0.0											0.3	
115																	
120																	
SUM	102.0	96.8	276.2	1101.7	804.6	264.0	56.9	14.5	5.9	0.2	0.1					2722.9	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 25000,														BY ALTITUDE		SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM	
LESS	6.2	10.6	45.3	142.2	140.6	43.3	12.0	2.2	3.2	0.3						405.9	
40	9.7	10.9	26.6	36.1	44.8	27.4	9.3	3.8	0.2	0.1						168.8	
60	2.7	5.8	8.9	22.1	18.7	11.2	7.8	2.0	0.7	0.2						80.1	
65	2.8	5.8	14.1	26.8	30.8	20.3	8.9	0.6	1.2							111.2	
70	3.0	6.4	17.7	42.5	40.6	29.4	4.0	0.1	0.1							144.0	
75	2.4	5.3	41.8	105.6	70.5	23.6	4.2									253.4	
80	2.8	6.0	46.6	186.1	111.1	11.9	3.9									368.3	
85	2.0	7.2	49.0	226.7	143.0	17.4	1.4									446.7	
90	2.1	4.6	33.4	167.4	158.5	22.6	2.3									390.9	
95	1.8	4.6	18.4	70.7	97.5	45.8	6.4									245.2	
100	0.2	1.3	5.8	24.5	37.6	22.7	3.7									95.9	
105		0.2	1.6	3.5	6.0	0.8										12.1	
110				0.3	0.0											0.3	
115																	
120																	
SUM	35.8	68.8	309.2	1054.5	899.7	276.5	63.7	8.7	5.4	0.6						2722.9	
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 27000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM	
LESS	0.4		1.4	1.1	2.1	1.0	0.2									6.2	
40	0.2			0.2	0.4											0.8	
60	0.1															0.1	
65		0.1														0.1	
70	0.1															0.1	
75																	
80		0.1														0.1	
85				0.6												0.6	
90			0.1	0.1	0.1											0.3	
95				0.1												0.1	
100			0.1													0.1	
105																	
110																	
115																	
120																	
SUM	0.8	0.2	1.6	2.1	2.6	1.0	0.2									8.5	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 27000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM	
LESS			0.7	2.8	2.6	0.2										6.2	
40			0.1	0.6	0.1											0.8	
60				0.1												0.1	
65				0.1												0.1	
70				0.1												0.1	
75																	
80				0.1												0.1	
85					0.6											0.6	
90				0.1	0.2											0.3	
95					0.1											0.1	
100				0.1												0.1	
105																	
110																	
115																	
120																	
SUM			0.8	4.0	3.6	0.2										8.5	



TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 27000,								BY ALTITUDE		1000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.2	1.2	1.6	6.9	10.4	6.0	2.4	0.4	1.1					31.2
40	0.6	0.5	1.8	2.2	3.2	1.8	0.4	0.1						10.6
60	0.2	0.2	0.1	0.9	0.6	0.7		0.1						2.8
65	0.4	0.3	0.3	0.8	0.9	0.5	0.5							3.7
70	0.1	0.8	0.2	0.6	0.4	0.6		0.1						2.8
75	0.0	0.1	0.6	1.3	0.9	1.6	0.1							4.6
80	0.0	0.1	0.5	0.4	0.4	0.5	0.2							2.1
85	0.1			0.5	1.0	0.2	0.2							1.9
90	0.1		0.1											0.2
95				0.1										0.1
100			0.1	0.3		0.5								0.9
105			0.1	0.2		0.9								1.2
110					0.2		0.1							0.3
115					0.2									0.2
120														
SUM	2.9	3.1	5.3	14.3	18.0	13.2	3.9	0.6	1.1					62.4

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 27000,								BY ALTITUDE		1000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.6	1.9	8.1	9.9	7.7	1.0	1.0							31.2
40	0.3	0.6	2.6	2.8	3.8		0.4							10.6
60	0.1	0.1	0.3	0.9	1.1		0.2	0.1						2.8
65	0.3	0.1	0.6	1.6	1.0		0.2							3.7
70	0.4		1.2	0.5	0.6			0.1						2.8
75	0.1	0.6	0.5	3.1	0.1	0.1	0.1							4.6
80	0.1	0.2	0.5	1.0		0.1	0.2							2.1
85	0.1	0.2	0.3	1.0	0.3		0.2							1.9
90	0.1		0.1											0.2
95				0.1										0.1
100				0.4	0.4	0.1								0.9
105				0.2	0.1	0.8								1.2
110					0.2		0.1							0.3
115					0.2									0.2
120														
SUM	3.1	3.6	14.2	21.5	15.4	2.0	2.4	0.2						62.4

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 27000,								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.8	0.8	3.7	12.1	17.4	16.4	6.1	1.0	0.5	0.2				59.0
40	2.0	2.9	1.5	3.3	11.9	4.9	7.8	2.1	1.0					37.5
60	0.5	0.5	2.1	1.9	7.3	9.9	2.5	0.1	0.8					25.7
65	0.3	0.4	2.7	12.1	15.8	6.2	3.2		0.7					41.2
70	0.6	2.4	3.9	9.6	13.9	3.4	2.1		0.1					35.9
75	1.0	0.9	5.2	20.5	20.0	4.9	1.4	0.1						54.1
80	0.5	2.3	9.7	43.7	43.5	4.8	0.7							105.2
85	0.6	2.4	11.3	62.5	39.0	10.1	0.1							125.9
90	0.9	1.1	9.6	77.3	46.2	2.0	0.1							137.1
95	0.6	1.8	6.7	50.2	20.1	2.0								81.5
100	0.1	0.2	0.5	7.7	14.7	2.3	0.1							25.6
105	0.3			0.9	0.3	0.1								1.6
110	0.2													0.2
115														
120														
SUM	8.6	15.7	56.8	301.8	250.2	67.2	24.1	3.3	2.7	0.2				730.4

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 27000,								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	2.1	1.2	5.0	14.7	28.7	5.2	1.4	0.5	0.3					59.0
40	1.2	0.6	2.5	7.5	10.3	8.2	6.2	1.0						37.5
60	0.4	0.3	3.2	7.3	8.4	4.4	1.0		0.8					25.7
65	0.2	1.3	12.2	8.3	10.4	5.7	2.7		0.5					41.2
70	0.5	1.0	5.0	12.6	12.8	3.3	0.6		0.1					35.9
75	0.4	1.3	7.6	23.5	15.8	4.8	0.5		0.1					54.1
80	0.4	1.1	17.0	60.8	22.3	3.4	0.3							105.2
85		0.2	17.3	69.0	35.4	4.0								125.9
90		0.5	9.1	63.7	59.1	4.8								137.1
95		0.6	1.1	34.3	40.8	4.7								81.5
100		0.1	1.1	8.6	10.4	5.4								25.6
105			0.6	0.3	0.6		0.1							1.6
110			0.2											0.2
115														
120														
SUM	5.3	8.1	81.8	310.6	255.0	53.7	12.8	1.5	1.5					730.4

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 27000,														BY ALTITUDE 5000	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
40				0.1	0.6	0.5	2.0	0.4						3.6	
60				0.4	1.1	3.5		0.3						5.3	
65				1.4	1.3	2.9	0.1							5.7	
70				0.1	1.4	0.8								2.3	
75				1.7	3.4	1.1								6.2	
80			0.3	14.8	1.7	0.2								17.0	
85			1.5	15.0	20.4	3.2								40.1	
90			1.5	18.6	23.3	6.9								50.3	
95				5.5	18.4	4.5								28.3	
100			0.2	0.9	17.3									18.4	
105	0.3													0.3	
110															
115															
120															
SUM	0.3	3.6	58.7	89.0	23.5	2.0	0.7							177.7	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 27000,														BY ALTITUDE 5000	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
40				0.1	1.7	0.7	0.6		0.4					3.6	
60				0.1	1.2	3.6		0.1	0.2					5.3	
65				1.4	3.9	0.4	0.1							5.7	
70					1.5	0.8	0.1							2.3	
75			0.9	0.6	3.9	0.8	0.1							6.2	
80			3.2	11.6	2.1	0.1	0.1							17.0	
85			3.3	11.6	19.2	5.8	0.2							40.1	
90			2.0	7.7	22.4	18.1	0.2							50.3	
95				3.1	10.1	13.7	1.4							28.3	
100				0.7	17.7									18.4	
105			0.3											0.3	
110															
115															
120															
SUM		9.6	37.0	83.8	44.0	2.6	0.1	0.5						177.7	
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 27000,														BY ALTITUDE 5000	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
40	2.4	2.0	6.6	20.1	29.9	23.4	8.7	1.4	1.6	0.2				96.3	
60	2.8	3.3	3.3	5.9	16.1	7.2	10.2	2.6	1.0					52.5	
65	0.9	0.7	2.2	3.2	9.0	14.1	2.5	0.4	0.8					33.8	
65	0.7	0.8	2.9	14.3	18.0	9.7	3.8		0.5					50.7	
70	0.9	3.1	4.1	10.3	15.6	4.8	2.1	0.1	0.1					41.1	
75	1.1	1.0	5.7	23.5	24.3	7.6	1.5	0.1						64.8	
80	0.5	2.5	10.4	58.9	49.6	5.4	1.0							124.5	
85	0.7	2.4	12.9	78.7	60.4	13.4	0.2							168.6	
90	1.0	1.1	11.3	96.0	69.6	8.9	0.1							188.0	
95	0.6	1.8	6.7	55.9	38.5	6.4								110.0	
100	0.1	0.2	0.9	8.9	32.0	2.8	0.1							45.1	
105	0.3	0.3	0.1	1.1	0.3	1.0								3.0	
110	0.2				0.2	0.1								0.5	
115					0.2									0.2	
120															
SUM	12.2	19.3	67.2	376.8	359.8	104.9	30.1	4.6	3.8	0.2				979.0	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 27000,														BY ALTITUDE 5000	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
40	3.8	3.1	13.7	27.4	38.9	6.4	2.4	0.5	0.3					96.3	
60	1.5	1.2	5.2	11.0	15.9	8.9	7.3	1.0	0.4					52.5	
60	0.5	0.4	3.5	8.5	10.7	8.0	1.2	0.2	1.0					33.8	
65	0.4	1.4	12.8	11.3	15.3	6.1	3.0		0.5					50.7	
70	0.9	1.0	6.2	13.2	15.0	4.1	0.7	0.1	0.1					41.1	
75	0.6	1.9	9.0	27.2	19.8	5.6	0.7		0.1					64.8	
80	0.6	1.3	20.7	73.5	24.3	3.5	0.6							124.5	
85	0.1	0.3	20.9	81.6	55.5	9.9	0.4							168.6	
90	0.1	0.5	11.2	71.5	81.7	22.8	0.2							188.0	
95		0.6	1.1	37.5	51.0	18.4	1.4							110.0	
100		0.1	1.1	9.9	28.5	5.5								45.1	
105			0.8	0.6	0.7	0.8	0.1							3.0	
110			0.2		0.2	0.1								0.5	
115					0.2									0.2	
120															
SUM	8.4	11.7	106.4	373.1	357.7	99.9	17.9	1.7	2.1					979.0	

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40			0.1		1.7			0.3	0.1					2.1			0.1
60																	
65																	
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM			0.1		1.7			0.3	0.1					2.1			
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40		0.1	1.0		0.7		0.4							2.1			0.1
60																	
65																	
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM		0.1	1.0		0.7		0.4							2.1			
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000,														BY ALTITUDE		1000	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40		0.6		3.5	2.9	2.2	0.9	1.7	0.2					11.9			
60				0.4			0.1							0.5			
65							0.0							0.0			
70							0.0							0.0			
75							0.3							0.3			
80								0.1						0.1			
85								0.1						0.1			
90								0.1						0.1			
95																	
100																	
105																	
110																	
115																	
120																	
SUM		0.6		3.9	2.9	2.2	1.4	2.0	0.2					13.1			
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,														BY ALTITUDE		1000	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40	0.4	1.4	3.0	1.9	4.1	0.8	0.3	0.4						11.9			
60					0.1									0.5			
65					0.0									0.0			
70					0.0									0.0			
75					0.3									0.3			
80					0.1									0.1			
85					0.1									0.1			
90					0.1									0.1			
95																	
100																	
105																	
110																	
115																	
120																	
SUM	0.4	1.4	3.0	1.9	4.9	0.8	0.3	0.4						13.1			

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		2000				
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS		0.9	4.8	7.0	2.8	1.7	0.5	0.3					18.0	
40	0.4	0.2	0.3	0.3	0.5	0.1	0.2						1.9	
60	0.3			0.6	1.3	0.2	0.1						2.5	
65	0.2	0.8	0.1	0.2	0.4	0.5	0.2						2.3	
70	0.2	0.1	0.8	0.5	0.8	0.1	0.1						2.5	
75	0.2	1.0	1.7	1.0	1.1	0.2							5.0	
80		1.4	2.2	2.4	1.3		0.2						7.4	
85			4.0	6.6	0.2								10.7	
90		0.4	6.9	7.5									14.8	
95	0.1		3.6	2.2									5.9	
100			2.9	3.9									6.7	
105		0.2	0.1	0.2									0.5	
110														
115														
120														
SUM	1.3	4.9	27.4	32.3	8.2	2.7	1.3	0.3					78.3	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		2000				
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS		0.1	4.6	5.6	4.5	3.1							18.0	
40	0.2		0.1	1.2	0.2	0.3							1.9	
60	0.2			1.2	0.6	0.5							2.5	
65	0.1	0.8		0.2	0.3	0.2	0.8						2.3	
70	0.4	0.3		0.3	0.6	0.4	0.6						2.5	
75	0.5	0.5	1.5	1.7	0.6	0.2	0.3						5.0	
80	0.4	0.3	2.1	2.0	2.2	0.3	0.3						7.4	
85	0.2		0.4	1.7	7.7	0.5	0.3						10.7	
90	0.8	0.2	0.2	1.9	10.2	1.5							14.8	
95	0.1			0.6	4.9	0.3							5.9	
100					6.7								6.7	
105		0.2	0.1	0.2									0.5	
110														
115														
120														
SUM	2.7	2.0	4.5	13.0	41.6	8.5	6.0						78.3	
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		5000				
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS				0.8									0.8	
40			0.3	0.3									0.6	
60				0.5									0.5	
65				1.0									1.0	
70				0.8									0.8	
75				1.4	0.3								1.6	
80				2.7									2.7	
85				0.1	18.5								18.6	
90					0.8								0.8	
95				0.1									0.1	
100														
105														
110														
115														
120														
SUM			0.5	26.7	0.3								27.4	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		5000				
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS					0.8								0.8	
40					0.6								0.6	
60					0.3	0.2							0.5	
65				0.1	0.6	0.2							1.0	
70			0.1	0.4	0.3								0.8	
75				0.9	0.8								1.6	
80				2.7									2.7	
85				0.1	17.0	1.5							18.6	
90					0.8								0.8	
95					0.1								0.1	
100														
105														
110														
115														
120														
SUM			0.4	22.7	4.4								27.4	

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.6	0.9	8.4	11.6	5.0	2.5	2.6	0.5					32.0
40		0.4	0.2	0.6	1.1	0.5	0.2	0.2						3.3
60		0.3		0.3	0.9	1.3	0.3	0.1						3.2
65		0.2	0.8	0.1	0.7	0.4	0.6	0.2						2.8
70		0.2	0.1	0.8	1.5	0.8	0.3	0.1						3.8
75		0.2	1.0	1.7	1.8	1.1	0.2	0.1						5.9
80			1.4	2.2	3.8	1.5		0.3						9.2
85				4.0	9.3	0.2		0.1						13.5
90			0.4	7.0	25.9									33.4
95		0.1		3.6	2.9									6.6
100				3.0	3.9									6.8
105			0.2	0.1	0.2									0.5
110														
115														
120														
SUM		1.8	4.9	31.8	63.6	10.7	4.2	3.6	0.5					121.0

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 29000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		1.4	4.1	6.5	10.4	5.3	3.8	0.4						32.0
40	0.5	0.1		0.1	1.4	1.0	0.3							3.3
60	0.2				1.3	1.2	0.5							3.2
65	0.1	0.8		0.2	0.6	0.4	0.8							2.8
70	0.4	0.3		0.4	1.5	0.6	0.6							3.8
75	0.5	0.5	1.5	1.8	1.1	0.4	0.3							5.9
80	0.4	0.3	2.1	2.0	3.1	1.1	0.3							9.2
85	0.2		0.4	1.7	10.6	0.5	0.3							13.5
90	0.8	0.2	0.2	2.0	27.2	3.0								33.4
95	0.1			0.6	5.7	0.3								6.6
100					6.8									6.8
105			0.2	0.1	0.2									0.5
110														
115														
120														
SUM	3.1	3.4	8.5	15.3	69.9	13.7	6.7	0.4						121.0

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 31000,								BY ALTITUDE		LESS					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS						1.3	0.0							1.4	
40															
60															
65															
70															
75															
80															
85															
90															
95															
100															
105															
110															
115															
120															
SUM						1.3	0.0							1.4	

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 31000,								BY ALTITUDE		LESS				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				1.2	0.1	0.1	0.0							1.4
40														
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM				1.2	0.1	0.1	0.0							1.4

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE 1000														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40		0.1	0.4	0.5	7.6	3.4	1.7	1.1	0.2					15.0
60						0.6								0.6
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM		0.1	0.4	0.5	7.6	4.0	1.7	1.1	0.2					15.6
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE 1000														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40		0.0	0.2	5.6	4.2	3.4	1.5	0.0						15.0
60				0.6										0.6
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM		0.0	0.2	6.2	4.2	3.4	1.5	0.0						15.6
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE 2000														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.4	0.3	0.8	7.8	19.6	7.9	4.0	3.2	0.4					44.4
60	0.7	0.8	1.2	13.2	2.3	3.0	0.5							21.8
65	0.4	0.4	0.2	8.8	9.2	0.3								19.2
70			0.7	0.7	0.6									2.0
75	0.2			0.2	0.4									0.8
80				0.2	0.1									0.3
85	0.2	0.5		0.3										1.0
90	0.7													0.7
95	0.1													0.1
100														
105														
110														
115														
120														
SUM	2.7	2.0	2.9	31.1	32.1	11.1	4.3	3.2	0.4					90.1
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE 2000														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.1	0.4	3.7	12.0	15.4	8.3	3.5	0.4	0.6					44.4
60	0.1	0.3	1.3	3.1	13.0	2.4	1.5							21.8
65		0.4	0.6	0.6	16.6	0.8	0.2							19.2
70			0.1	0.9	0.7	0.2								2.0
75			0.1	0.3		0.4								0.8
80				0.2		0.1								0.3
85				1.0										1.0
90				0.7										0.7
95				0.1										0.1
100														
105														
110														
115														
120														
SUM	0.2	1.1	5.9	18.8	45.8	12.2	5.2	0.4	0.5					90.1

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE 5000														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40				2.8	0.4	1.5								4.8
60			0.4		0.6									1.0
65				0.8	0.3									1.1
70				5.3	1.3									6.6
75			0.1	6.9										7.0
80			0.1	0.3										0.5
85			0.2											0.2
90														
95														
100														
105														
110														
115														
120														
SUM			0.8	16.2	2.6	1.5								21.1
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE 5000														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40				3.2	1.2	0.3								4.8
60			0.4		0.5	0.1								1.0
65					0.8	0.3								1.1
70					6.6									6.6
75				1.8	5.3									7.0
80				0.5										0.5
85				0.2										0.2
90														
95														
100														
105														
110														
115														
120														
SUM			0.4	5.6	14.5	0.7								21.1
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE SUM														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.4	0.4	1.2	8.2	27.2	12.6	5.7	4.3	0.5					60.7
60	0.7	0.8	1.2	16.1	2.7	5.1	0.5							27.1
65	0.4	0.4	0.5	8.8	9.8	0.3								20.2
70			0.7	1.5	0.8									3.1
75	0.2			5.5	1.7									7.4
80			0.1	7.1	0.1									7.3
85	0.2	0.5	0.1	0.6										1.4
90	0.7		0.2											0.8
95	0.1													0.1
100														
105														
110														
115														
120														
SUM	2.7	2.1	4.1	47.8	42.4	17.9	6.3	4.3	0.6					128.2
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 31000, BY ALTITUDE SUM														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.1	0.5	3.9	18.8	19.7	11.7	5.0	0.4	0.6					60.7
60	0.1	0.3	1.3	6.8	14.3	2.8	1.5							27.1
65		0.4	1.0	0.6	17.2	0.8	0.2							20.2
70			0.1	0.9	1.5	0.4								3.1
75			0.1	0.3	6.6	0.4								7.4
80				2.0	5.3	0.1								7.3
85				1.4										1.4
90				0.8										0.8
95				0.1										0.1
100														
105														
110														
115														
120														
SUM	0.2	1.1	6.5	31.8	64.5	16.3	6.7	0.4	0.6					128.2

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000, BY ALTITUDE														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40					0.5	0.6								1.1
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM					0.5	0.6								1.1
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000, BY ALTITUDE														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40				0.2	1.0									1.1
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM				0.2	1.0									1.1
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000, BY ALTITUDE 1000														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40			0.8	3.1	6.8	2.1	2.3	0.1						15.2
60					0.3									0.3
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM			0.8	3.1	7.1	2.1	2.3	0.1						15.5
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000, BY ALTITUDE 1000														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.3	0.7	1.0	6.7	5.7	0.6	0.4							15.2
60														0.3
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	0.3	0.7	1.0	6.7	5.7	0.6	0.4							15.5



TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000,								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.2	0.6	0.2	6.1	6.8	7.0	4.4	0.9		0.1				26.0
40	1.3	0.8	0.8	6.0	10.1	2.6	2.8	0.2						24.5
60	0.3	0.6	0.4	0.4	2.2		0.7							4.5
65	0.1	0.1	0.6	16.1	4.9	0.5	0.6							22.8
70	0.8	0.4	2.3	16.9	15.1	2.0	0.1							37.6
75			0.7	7.2	11.1	1.7	0.3							21.0
80	0.7	0.5	0.4	1.7	3.6	0.3								7.3
85	0.7	0.1	0.3		0.3									1.3
90		0.1												0.1
95														
100														
105														
110														
115														
120														
SUM	3.9	3.1	5.6	54.4	54.0	14.1	8.8	1.0		0.1				145.1
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000,								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			6.1	6.7	8.4	3.9	0.1	0.9	0.0					26.0
40	0.6	0.8	8.9	7.4	4.6	2.0	0.2							24.5
60		0.5	0.4	1.1	1.3	1.1	0.1							4.5
65		0.8	3.6	8.5	9.1	0.3	0.6							22.8
70		0.4	4.5	20.6	11.2	0.9								37.6
75			0.4	8.5	11.0	1.2								21.0
80			0.2	3.8	3.0	0.3								7.3
85			0.6	0.5	0.2									1.3
90				0.1										0.1
95														
100														
105														
110														
115														
120														
SUM	0.6	2.5	24.6	57.0	48.8	9.8	0.9	0.9	0.0					145.1
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 33000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.2	0.6	0.9	9.2	14.1	9.7	6.7	1.0		0.1				42.3
40	1.3	0.8	0.8	6.0	10.4	2.6	2.8	0.2						24.8
60	0.3	0.6	0.4	0.4	2.2		0.7							4.5
65	0.1	0.1	0.6	16.1	4.9	0.5	0.6							22.8
70	0.8	0.4	2.3	16.9	15.1	2.0	0.1							37.6
75			0.7	7.2	11.1	1.7	0.3							21.0
80	0.7	0.5	0.4	1.7	3.6	0.3								7.3
85	0.7	0.1	0.3		0.3									1.3
90		0.1												0.1
95														
100														
105														
110														
115														
120														
SUM	3.9	3.1	6.4	57.6	61.7	16.8	11.1	1.1		0.1				161.7
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 33000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.7	7.1	13.5	15.1	4.6	0.4	0.9	0.0					42.3
40	0.9	0.8	8.9	7.4	4.6	2.0	0.2							24.8
60		0.5	0.4	1.1	1.3	1.1	0.1							4.5
65		0.8	3.6	8.5	9.1	0.3	0.6							22.8
70		0.4	4.5	20.6	11.2	0.9								37.6
75			0.4	8.5	11.0	1.2								21.0
80			0.2	3.8	3.0	0.3								7.3
85			0.6	0.5	0.2									1.3
90				0.1										0.1
95														
100														
105														
110														
115														
120														
SUM	0.9	3.2	25.7	63.8	55.5	10.4	1.3	0.9	0.0					161.7

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40			0.1		0.3	0.1	0.1	0.3						0.8
60			0.1											0.1
65			0.1											0.1
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM			0.2		0.3	0.1	0.1	0.3						0.9
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40		0.1			0.3	0.2	0.3							0.8
60		0.1												0.1
65			0.1											0.1
70														0.1
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM		0.1	0.1		0.3	0.2	0.3							0.9
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE 1000														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.1	0.1		0.1	1.3	0.5	3.1	0.8						5.9
60				0.6			0.8							1.5
65			0.1	0.4										0.4
70			1.3	0.5										0.5
75			0.3											1.8
80			0.8											0.3
85														0.8
90														
95														
100														
105														
110														
115														
120														
SUM	0.1	0.1	2.6	2.0	1.3	0.5	3.8	0.8						11.2
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE 1000														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40			0.3	1.0	3.3	0.9	0.4							5.9
60			0.4	0.3		0.6	0.2							1.5
65				0.2	0.2									0.4
70				0.2	0.3									0.5
75			1.3	0.5										1.8
80			0.3											0.3
85			0.5	0.3										0.8
90														
95														
100														
105														
110														
115														
120														
SUM			2.8	2.5	3.8	1.5	0.6							11.2

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE 2000													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	1.1	1.4	0.2	5.1	6.9	4.4	7.8	2.8					27.3
60	0.6	1.4	2.5	4.6	9.4	0.9	2.1	0.4					37.0
65	0.7	1.1	3.7	15.6	19.8	11.5	0.8						21.8
70	0.5	0.9	2.3	5.8	15.1	2.1	0.2						53.2
75		0.1	2.4	4.2	6.6	0.9							27.1
80			1.9	1.5	2.3								14.3
85	0.0	1.2	1.2	0.2									5.7
90		0.2		0.1									2.6
95													0.3
100													
105													
110													
115													
120													
SUM	2.9	5.0	17.1	45.0	73.9	25.3	13.7	6.4					189.4
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE 2000													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.4	0.8	1.8	5.2	8.3	6.3	3.6	2.0					27.3
60	0.1	0.2	2.5	18.8	5.8	5.9	1.4	0.8					37.0
65	0.2	0.6	2.4	7.6	6.0	3.4	2.2						21.8
70	0.2		0.7	14.5	29.6	5.2	0.9						53.2
75	0.1		1.0	7.1	17.0	1.9	0.1						27.1
80	0.1		0.6	6.1	5.9	1.3							14.3
85			0.6	3.0	2.1								5.7
90			0.3	1.6	0.7								2.6
95			0.2	0.1									0.3
100													
105													
110													
115													
120													
SUM	0.9	1.9	12.5	63.9	75.4	23.9	8.0	2.8					189.4
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE 5000													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40													
60			0.1	0.6									0.7
65					2.0								2.0
70					0.5	0.2							0.7
75					0.3								0.3
80													
85													
90													
95													
100													
105													
110													
115													
120													
SUM			0.1	1.4	2.2								3.7
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 35000, BY ALTITUDE 5000													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40													
60				0.1	0.6								0.7
65			2.0										2.0
70			0.7										0.7
75			0.3										0.3
80													
85													
90													
95													
100													
105													
110													
115													
120													
SUM			3.0	0.1	0.6								3.7

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 35000,														BY ALTITUDE		SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40	1.2	1.5	2.8	5.3	8.5	5.0	11.0	3.9						34.0			
60	0.6	1.4	2.5	5.1	13.5	5.5	3.5	3.1						38.6			
65	0.7	1.1	3.9	16.0	19.8	13.5	0.8	2.1						23.0			
70	0.5	0.9	3.6	6.3	15.6	2.3	0.2							55.8			
75		0.1	2.7	4.2	6.9	0.9								29.6			
80			2.7	1.5	2.3									14.8			
85		0.0		1.2	0.2									6.4			
90			0.2		0.1									2.6			
95														0.3			
100																	
105																	
110																	
115																	
120																	
SUM	3.0	5.1	19.9	47.2	76.9	28.1	17.6	7.4						205.2			
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 35000,														BY ALTITUDE		SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40	0.4	0.9	3.4	19.1	5.8	6.5	1.6	2.0						34.0			
60	0.1	0.3	2.5	7.8	6.3	3.9	2.2	0.8						38.6			
65	0.2	0.6	2.5	16.7	29.9	5.2	0.8							23.0			
70	0.2		2.0	8.3	17.0	1.9	0.1							55.8			
75	0.1		1.3	6.4	5.9	1.3								29.6			
80	0.1		1.1	3.2	2.1									14.8			
85			0.3	1.6	0.7									6.4			
90			0.2	0.1										2.6			
95														0.3			
100																	
105																	
110																	
115																	
120																	
SUM	0.9	2.0	15.4	69.4	79.6	26.2	8.9	2.8						205.2			
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 36000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40				1.0	0.3	0.1	0.2	0.7						2.3			
60																	
65																	
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM				1.0	0.3	0.1	0.2	0.7						2.3			
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 36000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40				0.3	1.3		0.7							2.3			
60																	
65																	
70																	
75																	
80																	
85																	
90																	
95																	
100																	
105																	
110																	
115																	
120																	
SUM				0.3	1.3		0.7							2.3			

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 36000,												BY ALTITUDE 1000			
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	0.6		0.4	0.8	1.1	3.1	5.8	1.4	0.3					13.0	
60	0.0			0.6	1.2	1.7	0.2							5.4	
65					0.6	0.8	0.5							2.0	
70					0.1	0.1	0.5							0.7	
75				0.8	0.1	0.3								1.2	
80				0.2										0.2	
85															
90															
95															
100															
105															
110															
115															
120															
SUM	0.6		0.4	3.7	3.0	6.0	7.0	1.4	0.3					22.4	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 36000,												BY ALTITUDE 1000			
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	0.5	0.1	0.2	2.0	6.8	1.9	1.9							13.0	
60		0.1	0.1	0.9	2.5	0.1	0.3							5.4	
65		0.1	0.1	0.3			0.2							2.0	
70		0.1		1.1										0.7	
75				0.2										1.2	
80														0.2	
85															
90															
95															
100															
105															
110															
115															
120															
SUM	0.5	0.4	2.0	5.1	9.3	2.0	3.1							22.4	
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 36000,												BY ALTITUDE 2000			
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	3.6	4.7	1.5	2.1	8.5	9.4	7.8	3.8	0.2					33.2	
60	1.7	1.3	3.5	12.9	28.2	17.4	8.9	1.5						82.2	
65	0.5	0.5	2.9	5.3	25.1	10.7	3.9	0.3						51.7	
70	0.5	1.2	2.5	6.7	24.6	30.8	1.2							67.1	
75	0.4	0.4	2.5	14.4	30.0	15.6	2.2							66.4	
80		0.4	1.2	6.0	21.2	14.4	2.6							46.1	
85		0.3	1.1	2.3	2.9	1.6	0.2							8.4	
90			0.4	0.2	0.7	0.3								1.5	
95				0.1	0.4									0.5	
100					0.1									0.1	
105															
110															
115															
120															
SUM	6.6	8.4	18.0	50.0	141.7	100.1	26.7	5.5	0.2					357.2	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 36000,												BY ALTITUDE 2000			
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
40	0.8	1.1	0.6	7.3	7.5	10.9	6.3	0.5	0.2					33.2	
60		0.6	5.8	19.2	34.6	15.4	4.8	0.3						82.2	
65		1.2	4.5	21.6	15.1	7.5	2.5							51.7	
70		0.1	2.5	15.1	40.7	6.4	1.2							67.1	
75		0.1	3.6	19.9	37.3	5.4								66.4	
80		0.5	1.7	9.5	29.8	4.6								46.1	
85			1.6	3.7	3.1	0.1								8.4	
90			0.1	0.8	0.6									1.5	
95				0.2	0.3									0.5	
100				0.1										0.1	
105															
110															
115															
120															
SUM	0.8	3.5	20.5	97.5	168.9	50.3	14.8	0.8	0.2					357.2	

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 36000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40			1.0			5.0								6.0
60		2.3		0.6	0.7	0.3	0.1							4.1
65		1.0	0.4	1.2	6.3	4.0	0.6							13.5
70				2.5	8.3	3.3	0.3							14.3
75				0.5	1.8	4.0	0.3							6.7
80					0.6									0.6
85				0.5	1.2									1.7
90				0.1										0.1
95														
100														
105														
110														
115														
120														
SUM		3.3	1.4	5.4	18.9	16.5	1.3							47.0
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 36000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40				1.0	0.6	4.4								6.0
60			2.3	1.0	0.5	0.4								4.1
65			1.0	4.8	5.7	1.9								13.5
70			0.5	4.8	9.0									14.3
75				2.2	4.4									6.7
80					0.6									0.6
85				0.5	1.2									1.7
90					0.1									0.1
95														
100														
105														
110														
115														
120														
SUM		3.8	14.3	22.1	6.7									47.0
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 36000, BY ALTITUDE SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40	4.2	4.7	1.8	4.0	9.9	12.6	13.8	5.9	0.5					48.5
60	1.7	3.5	3.5	6.5	29.9	24.1	9.1	1.5						93.6
65	0.5	1.6	3.2	7.8	31.0	34.9	2.3	0.3						57.8
70	0.5	1.2	2.5	17.7	38.3	19.1	2.5							81.3
75	0.4	0.4	1.2	6.7	23.0	18.4	2.9							81.9
80		0.3	1.1	2.3	3.5	1.6	0.2							53.0
85			0.4	0.7	1.9	0.3								9.0
90				0.2	0.4									3.3
95					0.1									0.6
100														0.1
105														
110														
115														
120														
SUM	7.3	11.8	19.8	60.0	163.9	122.7	35.3	7.7	0.5					428.9
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 36000, BY ALTITUDE SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40	1.3	1.1	7.3	20.9	37.7	19.8	5.1	0.5	0.2					48.5
60		0.7	7.0	23.4	15.5	7.9	3.2	0.3						93.6
65		1.3	3.7	20.2	46.4	8.3	1.4							57.8
70		0.2	4.1	25.8	46.3	5.4								81.3
75		0.5	1.7	11.9	34.2	4.6								81.9
80			1.6	3.7	3.6	0.1								53.0
85			0.1	1.3	1.8									9.0
90				0.2	0.4									3.3
95				0.1										0.6
100														0.1
105														
110														
115														
120														
SUM	1.3	3.9	26.3	117.2	201.7	59.0	18.6	0.8	0.2					428.9

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 37000,								BY ALTITUDE		LESS				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40							0.3	0.1	0.3					0.6
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM							0.3	0.1	0.3					0.6
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 37000,								BY ALTITUDE		LESS				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40						0.2	0.4							0.6
60														
65														
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM							0.2	0.4						0.6
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 37000,								BY ALTITUDE		1000				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.4	0.3	0.8	1.9	5.3	5.6	5.3	3.7	1.3					23.3
60	0.1	0.1	0.2	0.1	1.3	1.4	1.3	0.3	0.2					7.5
65		0.2		0.1	0.7	0.3	1.4							2.8
70				0.1	0.1	0.3	1.3							1.9
75		0.2		0.1	0.1	0.9	0.4							1.4
80				0.1	0.1	0.7	0.4							1.5
85	0.2			0.1	0.1	0.1								0.5
90														0.2
95														
100														
105														
110														
115														
120														
SUM	0.6	0.7	1.1	3.9	8.0	9.4	10.1	3.9	1.4					39.2
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 37000,								BY ALTITUDE		1000				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40		0.8	2.4	4.1	6.2	4.1	3.9	1.4	0.3					23.3
60	0.2	1.2	1.8	1.5	1.6	0.7	0.7							7.5
65		0.2	0.1	0.7	0.1	0.9	0.6							2.8
70		0.1	0.2	0.1	0.4	0.4	0.8							1.9
75		0.1			0.1	0.3	0.9							1.4
80	0.2		0.2	0.2	0.2	0.8	0.1							1.5
85	0.2		0.1	0.3		0.1								0.5
90														0.2
95														
100														
105														
110														
115														
120														
SUM	0.5	2.5	4.7	6.7	8.6	7.3	7.0	1.4	0.3					39.2

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 37000, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.3	0.3	8.9	14.4	10.9	12.5	7.5	4.4	0.1				59.3
40	1.9	2.2	7.5	15.2	31.7	23.6	11.2	10.9	0.7					104.9
60	0.2	1.2	4.7	9.8	27.4	30.2	17.8	6.0						97.2
65	0.3	0.9	1.4	13.9	52.8	54.8	23.3	2.2						149.7
70		0.6	1.9	15.7	44.1	50.2	16.3	1.5						130.4
75	0.2	0.8	0.6	4.3	22.2	30.1	12.6		0.2					70.9
80		0.3	0.4	4.3	9.8	7.2	3.6							25.7
85		0.2		1.1	4.2	2.3								7.7
90				1.6	1.1									2.6
95														
100														
105														
110														
115														
120														
SUM	2.6	6.5	16.9	74.7	207.6	209.4	97.2	28.0	5.3	0.1				648.4
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 37000, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.6	1.7	10.6	18.3	9.6	15.1	2.6	0.7					59.3
40	1.6	1.1	8.8	30.9	27.0	18.0	12.9	4.0	0.2					104.9
60	0.8	1.1	2.7	16.4	47.8	19.5	6.9	2.0						97.2
65	1.0	1.3	5.0	23.7	68.1	44.0	4.8	1.7						149.7
70	0.1	1.1	1.6	41.5	56.1	26.6	3.0	0.4						130.4
75	0.1	0.6	2.7	9.4	47.8	9.4	0.7	0.2						70.9
80		0.6	1.1	5.9	13.0	4.7	0.3							25.7
85	0.1	0.1	0.1	2.5	2.9	2.0								7.7
90			0.3	1.0	0.6	0.7								2.6
95														
100														
105														
110														
115														
120														
SUM	3.8	6.4	24.0	141.9	281.6	134.6	43.8	10.9	1.2					648.4
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 37000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.6	14.9	13.6	4.8						33.9
40					3.2	0.1	4.0	0.4						7.7
60					1.0	3.6	0.3							4.9
65					1.7	7.2	3.9	0.1						12.9
70						6.9	4.1	1.0						12.0
75						1.2	1.1							2.4
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM				2.7	22.7	24.5	18.7	5.2						73.7
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 37000, BY ALTITUDE 5000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.8	18.1	15.0							33.9
40					2.4	0.2	3.1	1.9						7.7
60					1.2	3.1	0.2							4.9
65			0.4		4.3	7.8	0.8							12.9
70					0.6	9.1	2.3							12.0
75						1.5	0.9							2.4
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM			0.4	8.6	22.5	25.3	17.0							73.7



TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 37000,										BY ALTITUDE				SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS		0.3	0.4	10.9	19.7	16.5	18.1	11.3	5.9	0.1				83.2	
40	2.3	2.5	8.3	16.9	33.6	40.0	26.1	15.9	0.3					146.3	
60	0.3	1.3	4.9	9.8	31.3	30.6	23.2	6.4						107.8	
65	0.3	1.1	1.4	14.9	56.5	55.4	24.6	2.2						156.5	
70		0.6	1.9	17.4	51.4	55.0	16.7	1.5						144.7	
75	0.2	1.0	0.6	4.4	29.2	34.9	13.9		0.2					84.4	
80		0.3	0.4	4.4	11.3	8.5	3.6							28.6	
85	0.2	0.2		1.1	4.2	2.3								7.9	
90				1.6	1.1									2.6	
95															
100															
105															
110															
115															
120															
SUM	3.3	7.2	18.0	81.3	238.3	243.2	126.3	37.2	7.0	0.1				761.9	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 37000,										BY ALTITUDE				SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS		1.5	4.1	14.7	24.6	13.9	19.4	4.0	1.0					83.2	
40	1.6	2.3	10.5	32.5	29.4	36.8	28.7	4.0	0.5					146.3	
60	1.0	1.3	2.8	19.5	48.1	23.5	9.5	2.0						107.8	
65	1.0	1.3	5.5	25.0	71.6	44.6	5.7	1.7						156.5	
70	0.1	1.2	1.6	45.8	64.0	27.7	3.9	0.4						144.7	
75	0.3	0.6	2.9	10.0	57.1	12.5	0.8	0.2						84.4	
80		0.6	1.2	6.2	14.5	5.7	0.3							28.6	
85	0.3	0.1	0.1	2.5	2.9	2.0								7.9	
90			0.3	1.0	0.6	0.7								2.6	
95															
100															
105															
110															
115															
120															
SUM	4.3	8.9	29.2	157.2	312.7	167.5	68.2	12.4	1.5					761.9	
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 38000,										BY ALTITUDE				LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS				0.2	0.2	1.2	0.6	0.3	0.6	0.3				3.4	
40								0.9						0.9	
60															
65															
70															
75															
80															
85															
90															
95															
100															
105															
110															
115															
120															
SUM				0.2	0.2	1.2	0.6	1.2	0.6	0.3				4.3	
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 38000,										BY ALTITUDE				LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS			0.2	0.3	0.7	0.8	1.4							3.4	
40						0.9								0.9	
60															
65															
70															
75															
80															
85															
90															
95															
100															
105															
110															
115															
120															
SUM			0.2	0.3	0.7	1.7	1.4							4.3	

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 38000,								BY ALTITUDE		1000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.4		1.0	4.2	4.2	5.6	8.5	2.7	0.6	0.1			27.4
40	1.6	0.7	0.6	1.3	1.2	1.4	2.5	1.1	0.2					10.4
60	0.1			0.2	0.1	0.2	2.5		0.2					3.2
65		0.5			0.1	0.1	1.2							1.8
70					0.8	0.3	0.2							1.3
75					0.6		1.0							1.6
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	1.7	1.5	0.6	2.5	6.8	6.1	13.0	9.6	3.0	0.6	0.1			45.6
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 38000,								BY ALTITUDE		1000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.2	0.1	6.0	5.2	6.1	5.6	2.7	1.4					27.4
40	0.3	0.3	3.4	2.3	0.5	1.5	1.7	0.5						10.4
60			0.3	0.1	0.2	1.8	0.9							3.2
65				0.1	0.6	1.2	0.1							1.8
70						1.1	0.1	0.1						1.3
75						0.7	0.9							1.6
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM	0.3	0.4	3.8	8.5	6.4	12.3	9.3	3.3	1.4					45.6
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 38000,								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3	0.9	1.1	8.4	9.6	11.2	11.1	15.4	8.8	1.0	0.1			68.0
40	2.3	2.2	6.3	11.5	27.3	27.4	30.3	15.7	1.5					124.4
60	3.4	1.4	3.7	13.9	16.5	32.0	20.5	8.8	0.1					100.2
65	0.7	1.0	1.4	12.8	27.1	43.6	13.7	7.8	0.6					108.7
70	0.9	1.6	2.2	9.2	41.5	52.3	20.6	0.5						128.8
75	1.5	0.4	1.6	4.1	29.0	28.8	10.6							76.0
80	0.7		0.8	3.1	5.7	13.2	1.7							25.1
85	0.1	0.1	0.3	1.0	2.2	9.1	0.1							12.9
90	0.1			0.7	0.2									1.0
95														
100														
105														
110														
115														
120														
SUM	10.0	7.8	17.4	64.7	159.1	217.5	108.5	48.1	11.0	1.0	0.1			645.1
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 38000,								BY ALTITUDE		2000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1	0.0	2.5	15.8	11.3	8.4	17.3	12.0	0.5					68.0
40	1.6	0.6	7.1	16.6	27.3	34.2	22.7	13.4	0.9					124.4
60	0.9	0.6	4.0	16.6	23.5	37.1	15.2	2.4						100.2
65	0.6	0.7	2.7	14.9	48.6	31.5	8.5	1.3						108.7
70	0.8		2.6	24.4	65.0	30.5	5.3	0.2						128.8
75	0.3	0.7	1.4	9.4	43.1	14.3	6.1	0.1						76.0
80	0.2		0.6	4.3	9.7	5.6	4.4							25.1
85	0.2		0.5	0.9	7.5	3.8	0.1							12.9
90		0.4	0.6											1.0
95														
100														
105														
110														
115														
120														
SUM	4.8	3.2	21.8	103.4	236.1	165.4	79.7	29.3	1.4					645.1

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 38000,										BY ALTITUDE 5000				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40					4.4	5.4	0.1	2.1	0.3					13.8
60				0.3	0.3	6.3	11.4							18.3
65				0.2	9.4	7.7	3.3							20.6
70			0.5	1.2	9.5	4.3	1.4							16.9
75				0.8	4.4	4.0								9.2
80				0.3	0.8	0.3								1.4
85				0.4		1.7								2.1
90														
95														
100														
105														
110														
115														
120														
SUM		0.5	3.2	28.7	29.7	17.6	2.1	0.5						82.3

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 38000,										BY ALTITUDE 5000				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40					0.1									0.1
60				1.3	6.2	2.1	3.4	0.8						13.8
65				1.2	4.3	6.0	6.7	0.1						18.3
70				0.4	16.7	2.1	1.2	0.3						20.6
75				1.9	7.8	4.3	2.8							16.9
80				1.2	6.2	1.8								9.2
85			0.1	0.8		0.5								1.4
90		0.1		0.3		1.7								2.1
95														
100														
105														
110														
115														
120														
SUM		0.1	0.1	7.1	41.3	18.5	14.1	1.1						82.3

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 38000,										BY ALTITUDE SUM				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.3	1.3	1.1	9.6	14.0	16.6	17.4	24.2	12.2	2.0	0.2			98.8
60	3.9	2.9	6.9	12.8	32.9	34.1	34.2	19.8	2.1					149.5
65	3.5	1.4	3.7	14.4	16.9	38.5	34.3	8.8	0.3					121.7
70	0.7	1.5	1.4	13.0	36.6	51.4	18.2	7.8	0.6					131.1
75	0.9	1.6	2.7	10.4	51.7	56.9	22.2	0.5						146.9
80	1.5	0.4	1.6	4.9	33.9	32.8	11.6							86.7
85	0.7		0.8	3.3	6.5	13.5	1.7							26.5
90	0.1	0.1	0.3	1.4	2.2	10.8	0.1							15.0
95	0.1			0.7	0.2									1.0
100														
105														
110														
115														
120														
SUM	11.7	9.3	18.5	70.6	194.8	254.5	139.7	61.0	15.1	2.0	0.2			777.4

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 38000,										BY ALTITUDE SUM				
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.1	0.2	2.8	22.1	17.3	15.3	24.3	14.7	1.9					98.8
60	1.8	0.9	10.5	20.2	34.0	38.7	27.9	14.7	0.9					149.5
65	0.9	0.6	4.3	1.4	28.0	44.9	22.8	2.5						121.7
70	0.6	0.7	2.7	15.3	65.9	34.7	9.7	1.6						131.1
75	0.8		2.6	26.3	72.9	35.9	8.2	0.3						146.9
80	0.3	0.7	1.4	11.1	49.3	16.8	7.0	0.1						86.7
85	0.2		0.7	5.1	9.7	6.1	4.6							26.5
90	0.2	0.1	0.5	1.2	7.5	5.4	0.1							15.0
95		0.4	0.6											1.0
100														
105														
110														
115														
120														
SUM	5.0	3.7	25.9	119.2	284.5	197.9	104.5	33.7	2.8					777.4

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 39000, BY ALTITUDE														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40		0.3		0.3	0.3	0.6	0.6		0.1	0.4				2.2
60									0.1	0.1				0.5
65									0.1					0.4
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM		0.3		0.3	0.3	0.6	0.6		0.6	0.5				3.1
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 39000, BY ALTITUDE														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40			0.3	0.3	1.2	0.3	0.4	0.1						2.2
60							0.2							0.5
65							0.4							0.4
70														
75														
80														
85														
90														
95														
100														
105														
110														
115														
120														
SUM			0.3	0.3	1.2	0.3	1.0	0.1						3.1
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 39000, BY ALTITUDE 1000														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.5	0.1	0.4	0.9	3.3	4.1	3.1	3.5	2.4	0.8				18.5
60	0.7		1.1	1.7	1.3		2.9	0.6	0.4					8.5
65							0.3	0.2	0.2					1.4
70							0.1	0.4	0.2					0.7
75							0.2							0.2
80							0.7							0.7
85							0.1							0.1
90														
95														
100														
105														
110														
115														
120														
SUM	1.2	0.1	1.5	2.5	4.6	4.1	7.3	4.7	3.2	0.8				30.0
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 39000, BY ALTITUDE 1000														LESS
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
40	0.5	0.1	0.5	2.3	4.7	3.8	3.6	1.8	1.8					18.5
60				0.7	2.4	2.2	0.2	2.0	0.5					8.5
65						0.1	0.2							1.4
70								0.2	0.2					0.7
75								0.2						0.2
80								0.7						0.7
85								0.1						0.1
90														
95														
100														
105														
110														
115														
120														
SUM	0.5	0.1	1.0	5.4	7.0	4.4	6.9	2.0	2.0					

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 39000, BY ALTITUDE 2000														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	1.5	1.1	1.9	3.7	10.9	12.8	9.6	8.3	6.0	2.2	0.1			56.2
60	1.4	0.6	3.9	3.2	13.9	47.5	39.5	4.7	0.3					103.3
65	0.2	0.8	2.1	8.6	25.7	60.7	37.8	5.7						114.9
70		0.3	2.6	9.1	35.6	38.6	20.5	4.2						141.5
75		0.3	2.2	7.7	15.4	19.2	8.7	0.2						110.9
80			0.6	1.9	2.1	12.7	1.1							53.7
85			0.2		0.5	4.3								18.4
90														5.0
95														
100														
105														
110														
115														
120														
SUM	3.1	3.0	20.3	47.8	120.7	225.9	137.6	35.0	8.3	2.2	0.1			603.9
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 39000, BY ALTITUDE 2000														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40	1.6	1.9	2.1	5.9	9.6	13.8	13.5	7.6	3.3	0.4				56.2
60	0.6	0.2	2.9	7.8	32.2	36.4	32.4	1.5	0.7					103.3
65	0.3	0.5	2.6	12.7	49.0	47.8	24.8	3.4	0.3					114.9
70	0.7	0.3	1.3	27.7	45.2	23.1	9.5	1.6	1.0					141.5
75		0.2	2.3	9.4	29.3	9.4	2.9							110.9
80			1.5	2.7	7.5	4.4	0.9	1.4						53.7
85			0.2	0.4	4.0	0.4								18.4
90														5.0
95														
100														
105														
110														
115														
120														
SUM	3.2	3.2	22.7	82.7	205.6	152.6	106.5	19.5	7.5	0.4				603.9
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 39000, BY ALTITUDE 5000														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40					5.1	3.1								8.3
60				0.6	2.5									3.1
65					3.2									3.2
70				0.4		0.4								0.8
75			0.3	1.6	2.8	4.8	0.2							9.7
80			0.4	1.6	1.1	3.2								6.2
85			0.9	0.8	0.2									1.9
90														
95														
100														
105														
110														
115														
120														
SUM			1.6	5.0	14.9	11.5	0.2							33.3
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 39000, BY ALTITUDE 5000														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
40				0.5	6.9	0.9								8.3
60				0.4	2.8									3.1
65					3.2									3.2
70			0.4			0.4								0.8
75			1.3	1.0	2.0	5.4								9.7
80			2.0	0.3	1.5	2.5								6.2
85			1.7		0.2									1.9
90														
95														
100														
105														
110														
115														
120														
SUM			5.4	2.2	16.6	9.1								33.3

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 39000,														BY ALTITUDE		SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40	2.1	1.5	2.3	4.8	14.5	17.5	13.3	11.9	9.0	3.5	0.1			76.9			
60	2.1	0.6	3.9	3.9	23.0	33.2	23.3	12.4	1.9	0.1				120.5			
65	0.2	0.8	2.1	8.6	16.3	47.5	39.8	4.9	0.9					119.8			
70		0.3	2.6	9.5	29.0	60.7	37.9	6.0	0.2					145.4			
75		0.3	2.5	9.3	18.1	24.1	9.6	0.2						111.9			
80			1.0	3.5	3.2	15.9	1.2							54.0			
85			1.1	0.8	0.7	4.3								24.8			
90														6.9			
95																	
100																	
105																	
110																	
115																	
120																	
SUM	4.3	3.4	23.3	55.6	140.5	242.1	145.7	39.6	12.1	3.6	0.1			670.2			
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 39000,														BY ALTITUDE		SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40	2.1	2.0	10.5	19.0	37.4	18.3	24.6	3.9	2.3	0.4				76.9			
60	0.6	0.2	2.9	8.9	35.0	36.6	33.3	1.5	0.7					120.5			
65	0.3	0.3	2.6	12.7	52.3	48.0	24.8	3.6	0.4					119.8			
70	0.7	0.3	1.7	27.7	45.2	23.5	9.6	1.6	1.1					145.4			
75		0.2	3.6	10.4	31.3	14.8	3.6							111.9			
80			3.5	3.0	9.0	6.8	1.0	1.4						64.0			
85			1.9	0.4	4.2	0.4								24.8			
90														6.9			
95																	
100																	
105																	
110																	
115																	
120																	
SUM	3.7	3.3	29.4	90.6	230.3	166.4	114.4	21.6	10.2	0.4				670.2			
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40					0.7	1.4	0.8	0.8						3.6			
60							0.3							0.3			
65																	
70						0.2								0.2			
75						0.4								0.4			
80							0.6	0.1						0.7			
85								0.1						0.1			
90								0.4						0.4			
95																	
100																	
105																	
110																	
115																	
120																	
SUM					0.7	2.0	1.6	1.4						5.7			
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000,														BY ALTITUDE		LESS	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
40				0.5	1.0	1.0	1.1							3.6			
60							0.3							0.3			
65																	
70						0.2								0.2			
75						0.1	0.3							0.4			
80						0.7								0.7			
85						0.1								0.1			
90						0.4								0.4			
95																	
100																	
105																	
110																	
115																	
120																	
SUM				0.5	1.0	2.5	1.8							5.7			

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE 1000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.6	5.0	4.8	3.5	6.4	7.7	5.0	1.8				34.8
40	1.1	0.5	1.1	1.9	0.9	1.0	4.8	2.2	0.4	0.4				14.6
60						0.5	0.9	0.1						1.9
65	0.2					0.1	0.2	0.5						0.9
70							0.5	0.2						0.7
75							0.2	0.1						0.3
80								0.1						0.1
85														
90														
95														
100														
105														
110														
115														
120														
SUM	1.7	0.5	1.7	6.8	5.7	5.1	13.0	10.8	5.8	2.2				53.3
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE 1000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.3	0.1	6.6	6.2	2.8	8.1	7.5	2.9	0.2				34.8
40		0.3	2.5	1.4	1.2	0.5	4.8	3.9						14.6
60			0.4	0.1			1.0	0.4						1.9
65			0.2				0.2	0.6						0.9
70						0.2	0.3	0.2						0.7
75						0.2		0.1						0.3
80							0.1							0.1
85														
90														
95														
100														
105														
110														
115														
120														
SUM		0.6	3.2	8.1	7.4	3.7	14.5	12.7	2.9	0.2				53.3
MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			1.3	10.4	15.3	11.9	10.4	10.1	11.2	8.1	2.2	0.1		81.0
40	1.0	1.8	3.5	9.1	37.9	30.3	30.1	32.9	14.3	0.3				161.3
60	0.0	0.9	0.5	2.9	25.2	49.6	44.7	7.1	1.1					132.0
65	0.0	0.3	2.2	4.9	43.0	55.5	26.9	11.6						144.6
70	1.9	0.8	1.0	4.3	20.5	31.1	15.4	1.4	0.4					76.8
75	0.5	1.2	0.9	0.9	6.0	32.6	11.5	2.6						56.1
80		0.4	0.5		2.5	7.8	18.0							29.2
85				0.3	0.8	0.3	7.2							8.6
90			0.2	0.4										0.7
95														
100														
105														
110														
115														
120														
SUM	3.5	5.4	10.2	33.1	151.2	219.1	164.3	65.6	27.0	8.4	2.2	0.1		690.2
MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000, BY ALTITUDE 2000														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1	0.1	1.2	9.4	20.1	11.0	19.0	12.2	6.6	1.3				81.0
40	0.5	0.3	2.8	16.7	33.2	36.7	44.6	23.3	3.0					161.3
60	0.2		0.5	4.3	23.7	48.2	46.3	6.7	2.1					132.0
65	0.3	0.8	0.9	3.3	56.9	48.4	26.2	5.9	1.9					144.6
70	0.7	0.3	1.6	6.4	29.3	21.3	13.9	2.5	0.8					76.8
75		0.3	0.9	3.1	10.4	30.5	6.1	4.7						56.1
80			0.5	2.3	1.1	11.2	11.0	3.0						29.2
85				0.7		0.3	7.6							8.6
90					0.2	0.4								0.7
95														
100														
105														
110														
115														
120														
SUM	1.9	1.8	8.3	46.2	174.9	208.1	174.8	58.5	14.4	1.3				690.2

TABLE XLIII - Continued

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000,							BY ALTITUDE		5000					
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40				0.7	1.3	1.4		0.8						4.2
60					0.3	0.7	1.9	1.3	1.0					5.2
65				0.1	6.5	0.4	4.9	0.2						12.1
70				0.1	1.3	2.4	0.6							4.4
75			1.6	1.7	0.1	0.8	0.1							4.4
90			0.2	2.2		0.3								2.6
85				1.2										1.2
90														
95														
100														
105														
110														
115														
120														
SUM			1.8	6.0	9.5	6.1	7.6	2.2	1.0					34.2

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000,								BY ALTITUDE		5000				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
40				0.2	2.6	0.6	0.3	0.5						4.2
60				0.0	0.7	0.3	1.9	1.3	1.0					5.2
65				0.0	4.7	1.9	5.2		0.2					12.1
70				0.1	1.3	2.4	0.6							4.4
75			1.9	1.1	0.4	1.0								4.4
80			1.7	0.7		0.3								2.6
85			0.6	0.6										1.2
90														
95														
100														
105														
110														
115														
120														
SUM			4.3	2.8	9.8	6.5	7.9	1.8	1.2					34.2

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT 40000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			2.0	15.3	20.7	16.8	17.6	18.5	16.2	9.9	2.2	0.1		119.4
40	2.1	2.3	4.6	11.7	40.1	32.7	35.2	35.8	15.2	0.7				180.4
60	0.5	0.9	0.5	2.9	25.6	50.7	47.5	8.4	2.1					139.1
65	0.2	0.3	2.2	5.0	49.5	56.0	32.0	12.3						157.6
70	1.9	0.8	1.0	4.4	21.8	33.7	16.5	1.6	0.4					82.2
75	0.5	1.2	2.5	2.5	6.1	33.8	11.9	2.7						61.2
80		0.4	0.7	2.2	2.5	8.1	18.6	0.2						32.6
85				1.5	0.8	0.3	7.2	0.1						10.0
90			0.2	0.4				0.4						1.0
95														
100														
105														
110														
115														
120														
SUM	5.2	5.9	13.8	46.0	167.0	232.3	186.5	80.0	33.9	10.6	2.2	0.1		783.5

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT 40000,								BY ALTITUDE		SUM				
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1	0.4	1.3	16.5	27.3	14.8	28.3	19.7	9.5	1.5				119.4
40	0.5	0.6	5.3	18.3	37.0	37.8	50.0	27.8	3.0					180.4
60	0.2		0.8	4.5	24.4	48.5	49.2	8.4	3.2					139.1
65	0.3	0.8	1.0	3.4	61.6	50.3	31.5	6.5	2.1					157.6
70	0.7	0.3	1.6	6.5	30.6	24.1	14.8	2.8	0.8					82.2
75		0.3	2.8	4.2	10.8	31.8	6.4	4.8						61.2
80			2.2	2.9	1.1	12.2	11.1	3.0						32.5
85			0.6	1.3		0.5	7.6							10.0
90					0.2	0.8								1.0
95														
100														
105														
110														
115														
120														
SUM	1.9	2.4	15.8	57.6	193.0	220.8	198.9	73.0	18.5	1.5				783.5



TABLE XLIII - Concluded

MINUTES FOR TORQUE1 VS AIRSPEED BY WEIGHT								SUM,		BY ALTITUDE		SUM		
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	31.4	42.9	84.2	268.3	410.0	250.7	147.9	100.8	54.4	18.7	2.7	0.1		1412.3
40	75.8	47.9	77.7	154.2	279.8	246.8	170.9	98.2	21.3	0.8				1173.9
60	31.8	20.3	42.1	80.4	179.6	226.4	165.1	31.3	4.0					781.0
65	21.6	20.0	39.9	142.9	307.5	317.4	129.7	29.7	1.3					1010.0
70	28.0	21.8	54.9	167.2	317.5	265.4	85.5	8.7	0.7					949.7
75	25.5	26.4	78.3	249.0	267.4	199.7	54.8	3.6	0.3					905.1
80	27.9	31.4	103.6	429.4	238.0	79.6	28.9	0.6	0.2					939.8
85	21.1	27.0	107.1	370.3	297.4	53.6	10.5	0.3	0.7					1087.5
90	20.1	19.4	84.4	521.9	327.9	28.3	1.0	0.6						1003.4
95	11.9	16.7	43.8	262.4	201.8	47.7	0.4							584.8
100	7.3	7.2	18.6	85.6	96.8	15.8	0.3							231.6
105	1.7	2.0	7.5	12.0	7.5	1.7	0.3							32.7
110	0.4			0.3	2.7		0.1							3.5
115					0.2									0.2
120														
SUM	304.4	282.9	742.1	2943.9	2934.1	1733.3	795.5	273.7	83.2	19.5	2.7	0.1		10115.5

MINUTES FOR TORQUE2 VS AIRSPEED BY WEIGHT								SUM,		BY ALTITUDE		SUM		
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	17.2	34.3	129.9	404.6	429.2	179.9	136.0	57.4	21.6	2.2				1412.3
40	32.4	38.8	120.2	224.1	304.5	224.6	163.1	58.5	7.3	0.1				1173.9
60	9.5	18.0	48.3	127.4	219.6	205.2	130.9	16.6	5.5	0.2				781.0
65	8.5	22.3	62.8	165.8	411.3	232.8	88.3	14.0	4.2					1010.0
70	9.7	22.1	58.0	264.6	378.1	167.2	42.2	5.4	2.6					949.7
75	7.2	17.4	90.4	283.0	344.9	133.0	23.3	5.5	0.3					905.1
80	7.8	13.1	130.4	439.8	255.8	64.9	22.8	5.2						939.8
85	6.1	13.5	118.7	526.5	354.4	56.4	10.6	1.4						1087.5
90	5.8	8.8	74.5	424.2	408.8	77.0	3.7	0.5						1003.4
95	3.6	6.6	33.5	195.2	238.1	95.9	11.8							584.8
100	1.3	3.9	13.0	68.2	100.8	39.7	4.7							231.6
105	0.1	0.7	4.9	10.7	12.2	4.0	0.1							32.7
110			0.2	0.5	2.7		0.1							3.5
115					0.2									0.2
120														
SUM	109.2	199.3	884.7	3134.7	3460.4	1480.7	637.6	164.5	41.9	2.5				10115.5

TABLE XLIV. TIME FOR ENGINE TORQUE VERSUS ROTOR RPM BY MISSION SEGMENT, RATE OF CLIMB AND OUTSIDE AIR TEMPERATURE, SAMPLE II

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -1200, BY OAT													70	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185						0.2								0.2
190														
195														
200														
205														
SUM						0.2								0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -1200, BY OAT													70	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1	0.1								0.2
190														
195														
200														
205														
SUM					0.1	0.1								0.2

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -1200, BY DAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180														
185					0.2								0.2	
190														
195														
200														
205														
SUM					0.2								0.2	
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -1200, BY DAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180														
185				0.1	0.1								0.2	
190														
195														
200														
205														
SUM				0.1	0.1								0.2	
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY DAT														50
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180														
185				0.1									0.1	
190														
195														
200														
205														
SUM				0.1									0.1	
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY DAT														50
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180														
185			0.1										0.1	
190														
195														
200														
205														
SUM			0.1										0.1	
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY DAT														60
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180			0.1				0.1						0.2	
185			0.2				0.1						0.3	
190														
195														
200														
205														
SUM			0.3				0.2						0.5	
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY DAT														60
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180				0.1		0.1							0.2	
185			0.2		0.1								0.3	
190														
195														
200														
205														
SUM			0.2	0.1	0.1	0.1							0.5	
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY DAT														70
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180							0.1						0.1	
185			0.1	0.7	0.3	0.1							1.2	
190				0.1									0.1	
195														
200														
205														
SUM			0.1	0.8	0.3	0.1	0.1						1.4	

TABLE XLIV - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180				0.1									0.1
185				0.5	0.6								1.2
190				0.1									0.1
195													
200													
205													
SUM			0.1	0.7	0.6								1.4
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180				0.1		0.2							0.3
185				0.3				0.1					0.4
190													
195													
200													
205													
SUM				0.4		0.2		0.1					0.7
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180				0.1		0.1	0.1						0.3
185				0.2	0.1		0.1						0.4
190													
195													
200													
205													
SUM			0.3	0.1	0.1	0.2							0.7
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180			0.1										0.1
185				0.1	0.1		0.2	0.2	0.1				0.7
190				0.1									0.1
195													
200													
205													
SUM			0.1	0.2	0.1		0.2	0.2	0.1				0.8
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180			0.1										0.1
185			0.2			0.1	0.4						0.7
190			0.1										0.1
195													
200													
205													
SUM			0.3			0.1	0.4						0.8
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900, BY OAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180			0.2	0.1		0.2	0.2						0.7
185			0.3	1.2	0.3	0.1	0.3	0.3	0.1				2.6
190				0.2									0.2
195													
200													
205													
SUM			0.5	1.4	0.3	0.3	0.5	0.3	0.1				3.5
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -900 , BY OAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180			0.2	0.2	0.1	0.2							0.7
185			0.7	0.6	0.7	0.2	0.4						2.6
190			0.1	0.1									0.2
195													
200													
205													
SUM			1.0	0.9	0.8	0.4	0.4						3.5

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 50													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.1											0.1
185				0.2									0.2
190													
195													
200													
205													
SUM		0.1		0.2									0.3
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 50													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1										0.1
185			0.2										0.2
190													
195													
200													
205													
SUM			0.3										0.3
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.4	0.2	0.2	0.2	0.1						1.1
185			0.9	0.6	0.4	0.1							2.0
190													
195													
200													
205													
SUM			1.3	0.8	0.6	0.3	0.1						3.0
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.5	0.5			0.1						1.1
185			1.4	0.4	0.2								2.0
190													
195													
200													
205													
SUM			1.9	0.9	0.2		0.1						3.0
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.2	0.4	0.6	0.1	0.1	0.1						2.0
185		0.3	1.6	2.3	0.9	0.1	0.1	0.1					5.4
190			0.1	0.1	0.3								0.5
195													
200													
205													
SUM		0.5	2.7	3.0	1.3	0.2	0.2	0.1					7.9
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.8	0.9	0.1	0.2							2.0
185		0.4	1.6	2.0	1.2	0.2	0.1						5.4
190				0.2	0.2	0.1							0.5
195													
200													
205													
SUM		0.4	2.4	3.1	1.5	0.5	0.1						7.9
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.1	0.1	0.2			0.3	0.2	0.1	0.1			1.1
185		0.4	2.9	1.5	0.8	0.3	0.2	0.1	0.0				6.3
190		0.1		0.3	0.3	0.1							0.8
195													
200													
205													
SUM		0.6	3.0	2.0	1.1	0.4	0.5	0.4	0.1	0.1			8.2

TABLE XLIV - Continued

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.2	0.1	0.1	0.1	0.2	0.2	0.2					1.1
185		0.2	2.5	2.0	0.7	0.6	0.2	0.1					6.3
190			0.4	0.1	0.2		0.1						0.8
195													
200													
205													
SUM		0.4	3.0	2.2	1.0	0.8	0.5	0.3					8.2
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1	0.1								0.2
185	0.1		0.1	0.3	0.2		0.1	0.1					0.9
190						0.1							0.1
195													
200													
205													
SUM	0.1		0.1	0.4	0.3	0.1	0.1	0.1					1.2
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.2								0.2
185			0.1	0.4	0.2	0.2							0.9
190								0.1					0.1
195													
200													
205													
SUM			0.1	0.4	0.3	0.2		0.1					1.2
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.4	1.4	1.0	0.4	0.3	0.3	0.2	0.1	0.1		4.4
185	0.1		0.7	5.6	4.9	2.3	0.5	0.4	0.3	0.0			14.8
190			0.1	0.1	0.4	0.6	0.2						1.4
195													
200													
205													
SUM	0.1	1.2	7.0	6.4	3.3	1.0	0.8	0.5	0.1	0.1			20.6
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -600 , BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.2	1.5	1.4	0.4	0.4	0.3	0.2					4.4
185		0.6	5.8	4.8	2.2	1.0	0.3	0.1					14.8
190			0.4	0.3	0.4	0.1	0.1	0.1					1.4
195													
200													
205													
SUM		0.8	7.7	6.5	3.0	1.5	0.7	0.4					20.6
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 40													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.7									0.7
185				0.5									0.5
190													
195													
200													
205													
SUM				1.2									1.2
MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300 , BY OAT 40													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.7										0.7
185			0.5										0.5
190													
195													
200													
205													
SUM			1.2										1.2

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 50													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180			0.1	0.7		0.3							1.1
185				4.3	1.2	0.1							5.5
190													
195													
200													
205													
SUM			0.1	5.0	1.2	0.4							6.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 50													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180				0.1	1.0								1.1
185				4.5	1.0								5.5
190													
195													
200													
205													
SUM				4.6	2.0								6.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 60													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180			3.2	11.0	15.5	15.8	12.8	3.2	1.0	0.2			62.7
185			2.4	31.2	32.6	29.0	26.2	4.7	0.1	0.3			126.5
190				0.4	1.9	0.6							3.0
195													
200													
205													
SUM			5.6	42.7	50.0	45.5	39.0	7.9	1.1	0.5			192.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 60													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180		0.3	2.7	17.0	20.1	16.1	5.6	1.0					62.7
185			6.4	34.2	46.9	19.6	18.4	0.9	0.1				126.5
190				1.0	1.4	0.5							3.0
195													
200													
205													
SUM		0.3	9.1	52.2	68.4	36.2	24.0	1.9	0.1				192.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 70													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180	0.1			1.1		1.5							2.7
185	0.3	0.5	3.6	29.5	34.5	22.4	13.6	2.4	1.1	0.5			108.3
190			10.5	114.9	134.3	81.0	40.4	9.1	1.4	0.4			391.9
195			0.4	3.6	11.4	2.9	0.7						18.9
200					2.4								2.4
205					0.1								0.1
SUM	0.4	0.5	14.5	149.0	182.6	107.7	54.7	11.5	2.4	0.9			524.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 70													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180		0.8		0.8	0.4	1.5							2.7
185	0.1	0.8	1.8	26.8	44.9	25.4	4.3	3.7	0.6				108.3
190			4.0	87.7	174.6	83.7	32.1	9.2	0.1				391.9
195				1.6	11.4	4.1	1.4	0.4					18.9
200						2.4							2.4
205						0.1							0.1
SUM	0.1	0.8	5.8	116.9	231.3	117.3	37.8	13.2	1.1				524.3

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					0.3								0.3
180	0.1	0.3	4.1	13.0	20.3	10.6	6.2	4.0	2.0	2.2			62.7
185	0.1	0.9	4.0	49.1	65.4	43.1	25.0	8.2	3.0	0.5			199.3
190				7.1	12.7	6.8	1.1	0.2	0.3				28.2
195													
200													
205													
SUM	0.2	1.2	8.2	69.1	98.3	60.9	32.2	12.4	5.3	2.7			290.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					0.3								0.3
180	0.6	0.9	4.3	11.8	23.4	10.7	8.1	1.7	1.3				62.7
185		0.9	4.8	38.6	73.4	51.6	18.4	10.1	1.4	0.1			199.3
190				5.8	14.6	6.5	0.9	0.4					28.2
195													
200													
205													
SUM	0.6	1.8	9.0	56.4	111.3	69.0	27.4	12.2	2.7	0.1			290.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS		0.6											0.6
180	0.3	1.0	0.2	1.6	3.5	7.5	1.1	0.5	1.4	1.0			18.0
185		0.2	0.1	11.4	19.2	18.0	8.6	6.2	2.3	1.0	0.1		67.2
190				0.7	1.5	3.1	1.0	0.8	0.4				7.8
195													
200													
205													
SUM	0.3	1.7	0.3	13.6	24.2	28.6	10.7	7.5	4.3	2.0	0.1		93.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					0.6								0.6
180		0.6	1.3	4.2	7.2	1.7	1.7	1.1	0.1	0.1			18.0
185	0.1	0.1	3.4	11.6	18.7	13.9	15.0	2.7	1.7	0.3			67.2
190	0.6			0.5	2.6	1.0	3.1						7.8
195													
200													
205													
SUM	0.7	0.7	4.7	16.4	28.5	17.1	19.8	3.9	1.3	0.4			93.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.1	0.6			1.8								3.6
180	0.7	1.7	11.2	55.8	73.7	56.6	33.7	10.1	5.3	3.9			252.8
185	0.1	1.1	17.0	210.9	253.3	171.2	100.2	28.2	6.8	2.2	0.1		791.0
190			0.4	11.7	28.0	13.4	2.8	1.0	1.1				58.4
195					2.4								2.4
200					0.1								0.1
205													
SUM	0.9	3.4	28.7	279.4	357.5	243.0	136.7	39.3	13.3	6.1	0.1		1108.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB -300, BY OAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					2.1								3.6
180	0.6	2.6	10.1	60.0	96.5	53.8	19.6	7.6	2.0	0.1			252.8
185	0.2	1.0	18.6	177.2	314.5	168.9	83.9	22.9	3.5	0.4			791.0
190	0.6			9.4	30.0	12.1	5.5	0.8					58.4
195					2.4								2.4
200					0.1								0.1
205													
SUM	1.4	3.7	28.6	247.7	441.4	239.3	109.0	31.3	5.3	0.5			1108.3

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														300,	BY OAT	40	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS																	
180																	
185					0.6									0.6			
190					0.4									0.4			
195																	
200																	
205																	
SUM					1.0									1.0			

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														300 ,	BY	OAT	40
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
180																	
185			0.6										0.6				
190			0.4										0.4				
195																	
200																	
205																	
SUM			1.0										1.0				

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														300,	BY OAT	50
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS																
180						0.5								0.5		
185				0.9	3.9	0.4								5.2		
190				0.1										0.1		
195																
200																
205																
SUM				1.0	3.9	0.9								5.8		

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										300 ,	BY	OAT	50	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.5										0.5
185				3.8	1.3									5.2
190			0.1											0.1
195														
200														
205														
SUM			0.1	4.3	1.3									5.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB														300.	BY	OAT	60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS																	
180			0.3	2.7	4.6	4.5	12.3	7.6	6.5	0.1				32.4			
185			0.1	13.1	15.4	14.7	19.7	4.7	0.7					64.0			
190				0.6	0.2	0.7								1.5			
195																	
200																	
205																	
SUM			0.4	16.4	20.2	19.9	27.5	12.3	7.2	0.1				97.9			

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										300	BY	OAT	60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.3	3.9	7.8	11.9	7.2	1.4						32.4
185			0.8	14.6	20.8	16.6	9.7	0.5	0.9					64.0
190			0.1	0.6	0.5	0.3								1.5
195														
200														
205														
SUM			1.2	19.1	29.1	28.8	16.9	1.9	0.9					97.9



TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2	0.1	1.0								1.3
180	0.3		0.1	9.2	19.6	9.1	12.3	7.5	1.0	0.1				59.3
185			1.7	30.7	59.9	44.7	33.4	9.0	4.3	0.2				183.9
190				1.0	4.3	2.6								7.9
195					0.2									0.2
200					0.2									0.2
205														
SUM	0.3		1.8	41.0	84.2	57.4	45.8	16.5	5.3	0.3				252.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.1	0.2	1.0								1.3
180		0.3	3.0	7.2	17.6	18.3	11.5	1.4	0.1					59.3
185			0.6	28.4	66.6	46.8	29.1	11.0	1.2	0.2				183.9
190			0.3	0.2	3.3	3.0	1.0							7.9
195						0.2								0.2
200						0.2								0.2
205														
SUM		0.3	3.9	35.9	87.7	69.5	41.6	12.4	1.3	0.2				252.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.6									0.6
180	0.1	0.9	0.4	6.3	10.7	10.9	6.5	5.7	1.9	0.6	0.2			44.2
185	0.1	0.4	1.7	20.3	49.8	50.6	41.9	18.2	4.3	1.4				188.7
190			0.5	1.5	5.4	4.9	1.5	0.5	0.3					14.6
195														
200														
205														
SUM	0.2	1.3	2.5	28.1	66.4	66.4	49.8	24.4	6.7	2.1	0.2			248.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.6								0.6
180	0.2	0.4	1.1	6.0	12.6	14.4	6.3	1.7	1.4					44.2
185		0.4	0.9	19.7	49.5	64.6	37.6	11.5	4.3					188.7
190			0.1	1.6	4.3	6.4	1.7	0.4						14.6
195														
200														
205														
SUM	0.2	0.8	2.1	27.4	66.4	86.1	45.6	13.6	5.9					248.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				1.2	2.7	1.8	1.9	1.5	0.3	0.2	0.1			10.2
180	0.3	0.1	0.5	4.5	8.6	7.7	13.2	8.5	2.8	1.2	0.7			48.1
185				0.6	0.6	1.2	1.6	0.4	0.3					4.8
190														
195														
200														
205														
SUM	0.3	0.1	0.5	6.4	11.9	10.7	16.8	10.4	3.9	1.4	0.8			63.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.7	1.3	1.2	1.3	1.4	3.1	1.3						10.2
185	0.4	0.6	0.9	5.7	7.8	9.7	15.0	4.8	3.1	0.1				48.1
190			0.1	0.5	0.4	2.1	1.5	0.2						4.3
195														
200														
205														
SUM	0.4	1.3	2.3	7.4	9.6	13.1	19.5	6.3	3.1	0.1				63.1

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300, BY OAT													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2	0.7	1.0								1.9
180	0.4	0.9	0.8	19.4	37.6	26.7	33.0	22.3	4.3	1.0	0.3			146.6
185	0.4	0.5	4.0	69.5	138.2	118.1	103.9	40.4	12.1	2.8	0.7			490.5
190			0.5	3.8	10.8	9.4	3.1	0.9	0.8					29.2
195					0.2									0.2
200					0.2									0.2
205														
SUM	0.9	1.4	5.2	92.9	187.7	155.2	139.9	63.6	17.1	3.9	1.0			668.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 300 , BY OAT													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.1	0.2	1.6								1.9
180	0.2	1.4	5.7	18.8	39.3	45.9	28.1	5.8	1.5					146.6
185	0.4	1.0	3.1	72.9	146.1	137.8	91.4	27.8	9.7	0.3				490.5
190			0.7	3.3	8.6	11.8	4.2	0.6						29.2
195						0.2								0.2
200						0.2								0.2
205														
SUM	0.6	2.4	9.5	95.1	194.2	197.4	123.7	34.2	11.2	0.3				668.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT													40	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.4									0.4
190														
195														
200														
205														
SUM					0.4									0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600 , BY DAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.4										0.4
190														
195														
200														
205														
SUM				0.4										0.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				1.4	1.9	2.4								5.7
190														
195														
200														
205														
SUM				1.4	1.9	2.4								5.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600 , BY OAT													50	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.4	3.3	2.0									5.7
190														
195														
200														
205														
SUM			0.4	3.3	2.0									5.7

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 60													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180		0.1	1.2	3.4	3.5	6.6	0.5	0.3					15.5
185			5.4	9.1	9.0	5.8	4.0	1.5	0.2				35.1
190			0.1	0.3									0.4
195													
200													
205													
SUM	0.1	6.6	12.8	12.5	12.4	4.5	1.9	0.2					51.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 60													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180		0.1	2.4	6.2	2.0	4.7	0.1						15.5
185		2.0	6.5	10.2	6.3	9.1	0.3	0.7					35.1
190		0.1		0.3									0.4
195													
200													
205													
SUM	2.2	8.9	16.7	8.3	13.8	0.4	0.7						51.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180			0.5	2.8	8.5	11.2	10.2	3.8	1.0	0.2			0.5
185	0.2	1.4	11.4	34.2	27.4	22.0	18.0	4.4	0.3				37.7
190			0.6	0.2	0.2	0.3							119.9
195													1.3
200				0.4									0.4
205													
SUM	0.2	1.4	15.3	43.3	38.9	32.5	21.8	5.9	0.5				159.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180			0.1	0.4									0.5
185	0.1	0.8	3.1	8.5	17.8	6.0	0.9	0.6					37.7
190		0.1	11.7	35.9	26.2	25.2	18.4	2.1					119.9
195		0.2	0.1	0.4	0.3	0.7	0.1						1.3
200					0.4								0.4
205													
SUM	0.1	1.3	15.0	45.2	44.6	31.4	19.4	2.7					159.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.1	0.5	0.3	3.6	16.0	4.3	3.8	7.0	2.0	0.1			1.0
185	0.2		1.3	12.8	31.6	31.4	33.7	17.9	4.0				37.7
190				0.1	5.6	2.3	2.0	0.1	0.1				132.9
195					0.1								10.2
200				0.4	0.3								0.1
205													0.7
SUM	0.3	0.5	1.7	16.9	54.0	38.6	39.5	25.0	6.1	0.1			182.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.4	0.6	1.2	3.1	12.5	8.5	7.5	2.2	1.7				1.0
185			0.4	10.1	32.2	39.3	32.7	15.3	2.9				37.7
190			0.1	0.6	4.5	2.9	1.3	0.9					132.9
195					0.1								10.2
200					0.7								0.1
205													0.7
SUM	0.4	0.6	1.9	13.8	50.2	51.2	41.6	18.4	4.5				182.6

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT 90													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180			0.4	0.2	1.6	3.2	0.3	0.5	0.1				7.0
185			1.0	2.0	8.9	8.0	12.5	12.3	3.1	0.6			48.6
190				0.1	1.6	0.8	2.0	0.3	0.3				5.2
195													
200													
205													
SUM		1.4	2.3	12.1	12.0	14.4	13.1	4.1	0.6				60.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600 , BY OAT 90													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180	0.3		0.1	0.7	2.3	1.6	1.1	0.9					7.0
185		0.1	0.6	2.9	5.4	15.1	16.6	5.0	3.0				48.6
190			0.1	0.3	0.5	2.9	1.2	0.1	0.1				5.2
195													
200													
205													
SUM	0.3	0.1	0.8	3.9	8.2	19.6	18.8	6.0	3.1				60.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600, BY OAT SUM													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180	0.1	0.5	0.1	0.5	0.4	0.5							1.5
185	0.2	0.2	3.7	33.1	86.2	78.3	74.1	52.2	13.7	1.1			342.7
190				0.9	7.7	3.3	4.3	0.4	0.4				17.1
195					0.1								0.1
200				0.4	0.7								1.1
205													
SUM	0.3	0.7	4.6	42.6	124.5	104.4	99.2	64.4	18.3	1.4			460.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 600 , BY OAT SUM													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180	0.7	0.6	0.2	0.1	0.7	0.5							1.5
185		0.2	2.2	9.3	29.5	30.0	19.2	4.1	2.3				98.0
190			3.6	35.0	85.8	86.8	83.6	39.0	8.6				342.7
195			0.5	1.0	5.6	6.1	2.7	1.1	0.1				17.1
200					0.1								0.1
205					0.7	0.4							1.1
SUM	0.7	0.8	6.5	45.4	122.3	123.7	105.5	44.3	11.0				460.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 900, BY OAT 50													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180				0.1									0.1
185				0.3	1.0	0.1							1.4
190													
195													
200													
205													
SUM				0.4	1.0	0.1							1.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 900 , BY OAT 50													SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	
180					0.1								0.1
185				0.2	1.2								1.4
190													
195													
200													
205													
SUM				0.2	1.3								1.5

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900,	BY	OAT	60	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.5	1.1	1.3	2.9	1.7	1.1	0.1					8.9
185				2.1	4.4	4.8	2.0		0.4					13.8
190					0.4									0.4
195														
200														
205														
SUM			0.5	3.3	6.2	7.7	3.7	1.1	0.5					23.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900 ,	BY	OAT	60	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				1.2	4.3	1.2	1.1	1.0						8.9
185				2.0	6.9	3.8	0.8		0.3					13.8
190				0.1	0.3									0.4
195														
200														
205														
SUM				3.3	11.5	5.1	1.9	1.0	0.3					23.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900,	BY	OAT	70	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1	0.1	0.3									0.4
185			0.1	2.2	4.0	6.3	2.8	3.8	0.1					19.3
190	0.1			6.8	21.8	19.4	12.5	9.3	0.9					70.7
195				0.1	0.5	0.8	0.7							2.2
200														
205														
SUM	0.1		0.1	9.2	26.5	26.4	16.0	13.2	1.0					92.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900 ,	BY	OAT	70	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.1		0.3										0.4
185				1.8	3.7	9.0	2.5	0.3	0.1					19.3
190				4.6	27.7	22.4	8.7	5.5	1.8					70.7
195					0.4	0.6	1.0	0.1						2.2
200														
205														
SUM		0.1		6.6	33.7	32.1	12.2	5.9	1.9					92.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900,	BY	OAT	80	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1	0.1	0.1	0.5	4.8	1.9	1.3	5.7		0.1				14.6
185			0.1	6.7	30.3	24.4	11.4	8.2	4.8					86.0
190			0.1	0.2	2.0	0.3	0.1							2.7
195	0.1													0.1
200														
205														
SUM	0.2	0.1	0.3	7.4	37.1	26.6	12.9	13.9	4.9	0.1				103.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900 ,	BY	OAT	80	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.2	1.5	4.3	2.1	5.3	1.2						14.6
185			0.1	6.7	29.4	23.7	16.9	8.3	1.0					86.0
190				0.3	1.0	1.4	0.1							2.7
195					0.1									0.1
200														
205														
SUM			0.3	8.5	34.8	27.1	22.3	9.4	1.0					103.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900,	BY	OAT	90	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1		0.1	0.4	1.6	2.3	0.1	0.2	0.5					0.1
185			0.1	1.1	5.8	10.1	9.7	5.1	0.2					5.8
190			0.1		0.5	0.4	0.5							1.5
195														
200														
205														
SUM	0.1		0.3	1.6	7.9	12.8	10.3	5.9	0.7					39.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900,	BY	OAT	90	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.2			0.9	2.8	0.2	1.2	0.5						0.1
185		0.4	0.3	2.8	11.5	6.4	7.3	3.2		0.1				5.8
190				0.1	0.8	0.4	0.1	0.1						32.1
195														1.5
200														
205														
SUM	0.2	0.4	0.3	3.8	15.1	7.1	9.7	3.8		0.1				39.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900,	BY	OAT	SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1			0.1	0.3									0.5
185	0.1	0.1	0.8	4.3	11.7	13.5	6.0	11.5	0.7	0.1				48.7
190			0.2	17.2	63.3	58.8	35.6	22.6	6.3					204.0
195	0.1		0.2	0.2	3.4	1.5	1.4							6.7
200														0.1
205														
SUM	0.4	0.1	1.2	21.8	78.7	73.7	43.0	34.1	7.0	0.1				260.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										900,	BY	OAT	SUM	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.2	0.1		0.3		0.1								0.5
185			0.2	5.4	17.2	12.5	10.2	3.0	0.1					48.7
190		0.4	0.4	16.3	76.7	56.3	33.7	17.0	3.1	0.1				204.0
195				0.4	2.4	2.4	1.2	0.2						6.7
200					0.1									0.1
205														
SUM	0.2	0.5	0.6	22.4	96.4	71.3	45.1	20.1	3.2	0.1				260.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										1200,	BY	OAT	60	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					1.6	0.7	1.3							3.5
185				0.2	1.9	2.3	0.9							5.2
190						0.1								0.1
195														
200														
205														
SUM				0.2	3.5	3.1	2.1							8.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB										1200,	BY	OAT	60	
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.6	2.5	0.2	0.2							3.5
185				0.2	3.6	1.2	0.2							5.2
190					0.1									0.1
195														
200														
205														
SUM				0.8	6.2	1.4	0.4							8.8

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS						0.1								0.1
180				0.6	5.2	3.1	2.4	0.3	0.1					11.7
185				2.4	11.6	11.9	6.3	2.2						34.3
190						0.4								0.4
195					0.1									0.1
200														
205														
SUM				3.0	16.9	15.4	8.8	2.5	0.1					46.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS						0.1								0.1
180			0.4	1.5	3.9	4.3	1.5		0.1					11.7
185				2.2	17.5	5.5	7.3	1.9						34.3
190					0.1	0.3								0.4
195						0.1								0.1
200														
205														
SUM			0.4	3.8	21.5	10.2	8.7	1.9	0.1					46.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS														
180		0.2		0.3	2.2	1.9	0.1	0.4	0.4					5.5
185			0.2	2.2	14.5	15.6	5.4	2.8	1.3					42.0
190				0.1	1.7	1.4	0.1							3.4
195														
200					0.5									0.5
205														
SUM		0.2	0.2	2.6	19.9	19.0	5.7	3.2	1.7					51.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS														
180			0.1	0.3	2.2	2.0	0.6	0.4						5.5
185			0.3	1.0	16.0	15.3	7.9	1.4	0.1					42.0
190					1.0	2.2	0.2							3.4
195														
200					0.5									0.5
205														
SUM		0.4	1.3	19.6	19.5	8.7	1.7	0.1						51.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS														
180						2.5	0.8							3.3
185				0.7	5.5	8.9	3.1	0.3	0.1					18.6
190				0.1	0.5	1.0	0.1							1.7
195														
200														
205														
SUM				0.8	6.1	12.4	3.9	0.3	0.1					23.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS														
180					0.3	3.0								3.3
185	0.1			1.5	7.1	7.9	1.5	0.6						18.6
190		0.1			0.4	1.1			0.1					1.7
195														
200														
205														
SUM	0.1		0.1	1.5	7.8	11.9	1.5	0.6	0.1					23.6

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY DAT SUM													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180		0.2		0.4	9.0	8.1	4.6	0.7	0.1				23.9
185			0.2	5.5	31.4	38.8	15.6	5.3	1.4				100.1
190				0.2	2.3	2.9	0.2						5.5
195					0.1								0.1
200					0.5								0.5
205													
SUM		0.2	0.2	6.6	45.3	49.8	20.4	5.9	1.4				130.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1200, BY DAT SUM													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180			0.4	2.5	9.9	9.4	2.2	0.4	0.1				23.9
185	0.1		0.3	5.0	44.1	29.9	16.9	3.8	0.1				100.1
190			0.1		1.6	3.6	0.2		0.1				5.5
195						0.1							0.1
200					0.5								0.5
205													
SUM	0.1		0.8	7.5	55.1	43.0	19.3	4.2	0.3				130.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY DAT 60													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180					0.7	0.5	0.4						1.7
185				0.2	0.9	1.3	0.2						2.6
190													
195													
200													
205													
SUM				0.2	1.6	1.8	0.6						4.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY DAT 60													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180				0.1	1.1	0.3	0.1						1.7
185				0.4	1.0	0.9	0.3						2.6
190													
195													
200													
205													
SUM				0.5	2.2	1.2	0.4						4.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY DAT 70													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180			0.1		0.8	2.3	1.6	0.5					5.4
185				0.6	4.7	4.9	5.2	0.2	0.1				15.8
190													
195													
200													
205													
SUM			0.1	0.6	5.5	7.2	6.8	0.7	0.1				21.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY DAT 70													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180			0.1	0.1	0.7	3.1	1.4						5.4
185			0.1	0.3	9.0	4.0	2.4	0.1					15.8
190													
195													
200													
205													
SUM			0.2	0.4	9.7	7.1	3.8	0.1					21.2



TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.0			0.5									0.5
180		0.1	0.0	0.6	2.8	1.6	0.4						5.5
185		0.1	1.4	8.5	10.1	5.0	0.3	0.2					25.5
190			0.1	0.4	0.7								1.1
195													
200				0.6									0.6
205													
SUM	0.0	0.2	1.5	10.6	13.5	6.6	0.7	0.2					33.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.1	0.5								0.5
180			0.4	2.5	1.4	0.8							5.5
185			1.3	12.0	9.4	2.8		0.1					25.5
190			0.1	0.2	0.4	0.4							1.1
195													
200				0.6									0.6
205													
SUM			1.8	15.4	12.1	4.0		0.1					33.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.3	0.8	0.4							1.5
180				4.6	4.5	2.7							12.4
185			0.5	0.3	0.7	0.3	0.1						1.3
190													
195													
200													
205													
SUM			0.5	5.2	6.0	3.3	0.1						15.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.2	1.3								1.5
180				4.2	4.7	1.9							12.4
185	0.2		1.3	0.1	0.8	0.4		0.1					1.3
190													
195													
200													
205													
SUM	0.2		1.3	4.5	6.7	2.3		0.1					15.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS	0.0			0.5									0.5
180		0.2	0.0	2.5	6.4	4.0	0.9						14.0
185		0.1	2.6	18.6	20.8	13.1	0.6	0.5					56.2
190			0.1	0.7	1.4	0.3							2.4
195													
200				0.6									0.6
205													
SUM	0.0	0.3	2.8	22.8	28.6	17.3	1.5	0.5					73.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1500, BY OAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.1	0.4								0.5
180		0.1	0.6	4.4	6.6	2.3							14.0
185	0.2	0.1	3.2	26.2	18.9	7.3	0.1	0.2					56.2
190			0.1	0.3	1.1	0.8							2.4
195													
200				0.6									0.6
205													
SUM	0.2	0.2	3.9	31.7	27.0	10.5	0.1	0.2					73.8

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY DAT 60														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180				0.3	0.2	0.3								0.8
185				0.1	0.3	0.1								0.5
190														
195														
200														
205														
SUM				0.4	0.5	0.4								1.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY DAT 60														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180				0.4	0.4									0.8
185				0.3	0.2									0.5
190														
195														
200														
205														
SUM				0.7	0.6									1.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.4	1.8	1.0							3.3
185			0.1	0.1	2.1	3.2	1.8	0.4						7.6
190						0.1								0.1
195														
200					0.1									0.1
205														
SUM			0.1	0.1	2.6	5.2	2.8	0.4						11.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.2	1.6	1.5							3.3
185			0.2	0.2	3.1	2.6	1.6							7.6
190						0.1								0.1
195														
200						0.1								0.1
205														
SUM			0.2	0.2	3.3	4.4	3.0							11.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, HY RATE OF CLIMB 1800, BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.8	1.0	0.4	1.0						3.2
185				0.2	4.2	5.2	4.6	0.8						15.0
190														
195														
200														
205														
SUM				0.2	5.0	6.1	5.0	1.8						18.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800 , BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					1.0	2.2								3.2
185				0.7	5.4	6.6	2.3							15.0
190														
195														
200														
205														
SUM				0.7	6.4	8.9	2.3							18.2

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185			0.1	1.2	1.1	0.6	0.1	0.1					3.2
190				0.1	0.3	0.4							0.9
195													
200													
205													
SUM			0.1	1.3	1.4	1.0	0.1	0.1					4.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180													
185			0.0	0.7	2.1	0.3	0.0						3.2
190				0.3	0.1	0.3							0.9
195													
200													
205													
SUM			0.0	1.2	2.2	0.6	0.0						4.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180				1.5	2.9	1.9	1.0						7.2
185		0.1	0.4	7.6	9.8	7.1	1.2	0.1					26.3
190				0.1	0.4	0.4							1.0
195													
200				0.1									0.1
205													
SUM		0.1	0.4	9.3	13.2	9.3	2.3	0.1					34.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 1800, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180				1.5	4.2	1.5							7.2
185		0.2	0.9	9.5	11.5	4.2	0.0						26.3
190				0.5	0.2	0.3							1.0
195													
200					0.1								0.1
205													
SUM		0.2	0.9	11.5	16.1	5.9	0.0						34.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180					0.4								0.4
185													
190													
195													
200													
205													
SUM					0.4								0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180					0.4								0.4
185													
190													
195													
200													
205													
SUM					0.4								0.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180					0.5	0.5							1.0
185				0.2	1.3	1.4	1.0	0.3					4.2
190						0.1							0.1
195													
200													
205													
SUM				0.2	1.8	2.0	1.0	0.3					5.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 70													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180					0.9	0.1							1.0
185				0.9	1.4	0.9	0.1	0.4					4.2
190					0.1								0.1
195													
200													
205													
SUM				0.9	2.4	1.0	0.1	0.4					5.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180					0.2	0.2	0.1	0.1					0.6
185				0.4	1.5	2.2	1.5	1.4					7.0
190					0.2								0.2
195													
200													
205													
SUM				0.4	1.9	2.4	1.6	1.5					7.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180				0.2	0.2	0.2							0.6
185			0.1	0.9	4.1	1.3	0.1	1.0					7.0
190						0.2							0.2
195													
200													
205													
SUM			0.1	0.7	4.3	1.7	0.1	1.0					7.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180						0.5							0.5
185				0.2	1.2	0.7	0.6						2.7
190				0.1		0.3							0.4
195													
200													
205													
SUM				0.3	1.2	1.5	0.6						3.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180						0.5							0.5
185				0.4	1.3			0.9					2.7
190				0.2	0.2								0.4
195													
200													
205													
SUM				0.6	1.5	0.5		0.9					3.6

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180						1.1	1.2	0.1	0.1					2.5
185					0.9	4.0	4.2	3.1	1.7					13.9
190					0.1	0.2	0.4							0.7
195														
200														
205														
SUM					0.9	5.2	5.9	3.2	1.3					17.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG ASCENT, BY RATE OF CLIMB 2100 , BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180				0.2	1.4	0.8							2.5	
185			0.1	2.0	6.7	2.2	0.2	2.7					13.9	
190				0.2	0.3	0.2							0.7	
195														
200														
205														
SUM			0.1	2.4	8.5	3.2	0.2	2.7					17.1	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1900, BY OAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1													0.1
185														
190														
195														
200														
205														
SUM	0.1													0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1800 , BY OAT														60
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185														
190														
195														
200														
205														
SUM				0.1										0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1800, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1													0.1
185														
190														
195														
200														
205														
SUM	0.1													0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1800 , BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180			0.1										0.1	
185														
190														
195														
200														
205														
SUM			0.1										0.1	

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185	0.2	0.1	0.1										0.5
190													
195													
200													
205													
SUM	0.2	0.1	0.1										0.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180														
185				0.5										0.5
190														
195														
200														
205														
SUM				0.5										0.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185	0.2	0.1	0.1											0.5
190														
195														
200														
205														
SUM	0.2	0.1	0.1											0.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -1200 , BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180														
185			0.5										0.5	
190														
195														
200														
205														
SUM			0.5										0.5	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1									0.1
190														
195														
200														
205														
SUM					0.1									0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
.ESS														
180														
185					0.1									0.1
190														
195														
200														
205														
SUM					0.1									0.1

TABLE XLIV - Continued

TABLE RELV - Continued														
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB										-900,	BY	OAT	80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.2										0.2
190														
195														
200														
205														
SUM				0.2										0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900 , BY OAT 80														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180														
185		0.1	0.1											0.2
190														
195														
200														
205														
SUM		0.1	0.1											0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900, BY OAT 90														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180														
185			0.2	0.2										0.4
190														
195														
200														
205														
SUM			0.2	0.2										0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900 , BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185	0.4												0.4
190													
195													
200													
205													
SUM	0.4												0.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900, BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90'	100	110	120	SUM
LESS														
180														
185				0.4	0.3									0.7
190														
195														
200														
205														
SUM				0.4	0.3									0.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -900 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185		0.4	0.1	0.1	0.1									0.7
190														
195														
200														
205														
SUM		0.4	0.1	0.1	0.1									0.7

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1	0.1										0.2
185		0.1												0.1
190														
195														
200														
205														
SUM		0.1	0.1	0.1										0.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1	0.1									0.2
185				0.1										0.1
190														
195														
200														
205														
SUM				0.2	0.1									0.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.5										0.5
190													
195													
200													
205													
SUM			0.5										0.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.5										0.5
190														
195														
200														
205														
SUM				0.5										0.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.3	0.6									1.0
190														
195														
200														
205														
SUM				0.3	0.6									1.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185		0.3	0.2	0.4										1.0
190														
195														
200														
205														
SUM		0.3	0.2	0.4										1.0



TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1	0.1										0.2
185		0.1		0.9	0.6									1.6
190														
195														
200														
205														
SUM		0.1	0.1	1.0	0.6									1.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -600, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1	0.1									0.2
185		0.3	0.2	1.1										1.6
190														
195														
200														
205														
SUM		0.3	0.2	1.2	0.1									1.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.2									0.8
185	0.3	0.4												
190														
195														
200														
205														
SUM	0.3	0.4			0.2									0.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.8									0.8
185														
190														
195														
200														
205														
SUM					0.8									0.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT														70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180														
185				3.9	1.3									5.2
190														
195														
200														
205														
SUM				3.9	1.3									5.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT														70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180														
185				5.2										5.2
190														
195														
200														
205														
SUM				5.2										5.2

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT 80													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180													
185				7.1	3.4	0.3	0.2						10.9
190													
195													
200													
205													
SUM				7.1	3.4	0.3	0.2						10.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT 80													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180													
185		0.1	0.2	8.0	2.5	0.1							10.9
190													
195													
200													
205													
SUM		0.1	0.2	8.0	2.5	0.1							10.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT 90													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180													
185						0.1							0.1
190													
195													
200													
205													
SUM						0.1							0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT 90													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180													
185		0.1											0.1
190													
195													
200													
205													
SUM		0.1											0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT SUM													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180	0.3	0.4			0.2								0.8
185				11.0	4.7	0.4	0.2						16.2
190													
195													
200													
205													
SUM	0.3	0.4		11.0	4.9	0.4	0.2						17.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB -300, BY OAT SUM													
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
180					0.8								0.8
185		0.2	0.2	13.2	2.5	0.1							16.2
190													
195													
200													
205													
SUM		0.2	0.2	13.2	3.3	0.1							17.0

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY DAT 60													SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS														
180	0.1													0.1
185			0.1											0.1
190														
195														
200														
205														
SUM	0.1		0.1											0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300 , BY DAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185					0.1									0.1
190														
195														
200														
205														
SUM				0.1	0.1									0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.7										0.7
190														
195														
200														
205														
SUM				0.7										0.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.7										0.7
190														
195														
200														
205														
SUM				0.7										0.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1	0.2									0.3
190														
195														
200														
205														
SUM				0.1	0.2									0.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300 , BY QAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.2	0.1									0.3
190														
195														
200														
205														
SUM				0.2	0.1									0.3

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.1												0.1
185				0.9	0.2									1.0
190														
195														
200														
205														
SUM		0.1		0.9	0.2									1.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 300, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185				0.9	0.2									1.0
190														
195														
200														
205														
SUM				1.0	0.2									1.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 600, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.3	0.2									0.5
185														
190														
195														
200														
205														
SUM				0.3	0.2									0.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 600, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1	0.4								0.5
185														
190														
195														
200														
205														
SUM					0.1	0.4								0.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 600, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.2	0.2								0.4
185														
190														
195														
200														
205														
SUM					0.2	0.2								0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 600, BY OAT														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1	0.3									0.4
190														
195														
200														
205														
SUM				0.1	0.3									0.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 600, BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.3	0.2									0.5
185				0.2	0.2								0.4
190													
195													
200													
205													
SUM			0.3	0.4	0.2								0.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 600, BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1	0.4								0.5
185			0.1	0.3									0.4
190													
195													
200													
205													
SUM			0.1	0.4	0.4								0.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900, BY OAT													60
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185		0.1											0.1
190													
195													
200													
205													
SUM		0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900, BY OAT													60
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185				0.1									0.1
190													
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900, BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185		0.1											0.1
190													
195													
200													
205													
SUM		0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG MANUVR, BY RATE OF CLIMB 900, BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185				0.1									0.1
190													
195													
200													
205													
SUM				0.1									0.1

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														50
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.2										0.2
190														
195														
200														
205														
SUM				0.2										0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														50
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185		0.2												0.2
190														
195														
200														
205														
SUM		0.2												0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185	1.0													1.0
190	0.1													0.1
195														
200														
205														
SUM	1.1													1.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185	0.1	0.8	0.1											1.0
190	0.1													0.1
195														
200														
205														
SUM	0.2	0.8	0.1											1.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.0	0.1											0.1
185	1.4	0.1	0.0											1.6
190														
195														
200														
205														
SUM	1.4	0.1	0.1											1.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1											0.1
185	0.5	0.4	0.2	0.5										1.6
190														
195														
200														
205														
SUM	0.5	0.4	0.4	0.5										1.7

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS, BY OAT														80	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS	0.1													0.1	
180	0.4													0.4	
185		0.2												0.2	
190															
195															
200															
205															
SUM	0.5	0.2												0.7	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS , BY OAT														80	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS	0.1													0.1	
180	0.2	0.2												0.4	
185					0.1	0.1								0.2	
190															
195															
200															
205															
SUM	0.3	0.2			0.1	0.1								0.7	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180	0.4	0.0	0.1											0.5
185	2.5	0.3	0.0	0.2										3.0
190	0.1													0.1
195														
200														
205														
SUM	3.0	0.3	0.1	0.2										3.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB LESS , BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180	0.2	0.2	0.1											0.5
185	0.6	1.4	0.3	0.5	0.1	0.1								3.0
190	0.1													0.1
195														
200														
205														
SUM	1.0	1.6	0.5	0.5	0.1	0.1								3.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT														50	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS															
180				0.1											0.1
185															
190															
195															
200															
205															
SUM				0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100 , BY OAT														50	SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120			
LESS															
180		0.1												0.1	
185															
190															
195															
200															
205															
SUM		0.1												0.1	

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 60														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.4	0.6	0.4											1.4
185	0.7	1.4												2.1
190	0.3													0.3
195														
200														
205														
SUM	1.5	2.0	0.4											3.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 60														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.5	0.8	0.2											1.4
185	0.3	1.4	0.3											2.1
190		0.3												0.3
195														
200														
205														
SUM	0.8	2.4	0.5											3.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	1.6	0.5	0.3	0.2										2.6
185	6.1	1.6	1.3	0.3	0.1									9.5
190		0.1												0.1
195														
200														
205														
SUM	7.8	2.2	1.6	0.5	0.1									12.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.1	1.1	0.5	0.8	0.2									2.6
185	0.9	3.3	3.4	1.7	0.1									9.5
190	0.1													0.1
195														
200														
205														
SUM	1.1	4.5	3.9	2.5	0.3									12.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.6	0.3	0.2	0.1										0.1
185	1.7	0.6	0.5	0.3										1.2
190	0.3													3.0
195														0.3
200														
205														
SUM	2.5	0.9	0.7	0.4										4.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.6	0.2	0.3	0.1										0.1
185	0.7	0.8	1.0	0.3	0.2									1.2
190		0.3												3.0
195														0.3
200														
205														
SUM	1.3	1.3	1.3	0.5	0.2									4.5



TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100, BY OAT													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.1												0.1
180	2.7	1.4	0.9	0.4										5.3
185	8.5	3.5	1.8	0.6	0.1									14.6
190	0.5	0.1												0.6
195														
200														
205														
SUM	11.8	5.1	2.7	1.0	0.1									20.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -2100 ,													BY	OAT	SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS				0.1										0.1	
180	1.2	2.1	1.0	0.8	0.2									5.3	
185	1.9	5.5	4.8	2.0	0.3									14.6	
190	0.1	0.5												0.6	
195															
200															
205															
SUM	3.2	8.2	5.8	3.0	0.5									20.6	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT													60	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.2	1.0	0.9		0.4	0.3								2.9
185	1.1	3.3	1.0	0.2										5.6
190														
195														
200														
205														
SUM	1.3	4.3	1.9	0.2	0.4	0.3								8.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT													60	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.3	0.9	0.9	0.8	0.1									2.9
185	1.4	1.3	2.6	0.1	0.2									5.6
190														
195														
200														
205														
SUM	1.6	2.2	3.5	0.9	0.3									8.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT													70	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1													0.1
185	2.2	1.6	0.3	1.2		0.1								5.4
190	10.7	3.6	3.7	1.2		0.1								19.3
195	0.2	0.1	0.5	0.2										0.9
200														
205	0.2	0.2												0.4
SUM	13.4	5.6	4.4	2.5		0.2								26.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT													70	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1													0.1
185	0.8	1.1	1.4	1.1	1.0									5.4
190	1.6	3.0	7.3	6.4	0.9									19.3
195		0.7	0.1	0.1										0.9
200			0.2	0.2										0.4
205														
SUM	2.5	4.9	9.0	7.8	1.9									26.1

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT														80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180	1.0	0.2												1.2
185	2.3	2.4	0.6	0.1										5.4
190	0.2	0.2	0.1											0.5
195														
200														
205														
SUM	3.6	2.8	0.7	0.1										7.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT														80
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180	0.2	0.5	0.3	0.1	0.1									1.2
185	1.2	0.7	2.1	1.0		0.2								5.4
190	0.1	0.2	0.2											0.5
195														
200														
205														
SUM	1.6	1.5	2.6	1.1	0.1	0.2								7.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT														90
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185	0.2													0.2
190														
195														
200														
205														
SUM	0.2													0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT														90
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.1		0.1									0.2
190														
195														
200														
205														
SUM			0.1		0.1									0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180	3.5	2.8	1.2	1.2	0.4	0.4								9.5
185	14.3	9.3	5.2	1.5		0.1								30.4
190	0.4	0.3	0.6	0.2										1.4
195														
200	0.2	0.2												0.4
205														
SUM	18.4	12.6	7.0	2.8	0.4	0.5								41.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1800, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180	1.3	2.5	2.5	2.0	1.1									9.5
185	4.2	5.1	12.1	7.5	1.2	0.2								30.4
190	0.1	0.9	0.3	0.1										1.4
195														
200			0.2	0.2										0.4
205														
SUM	5.8	8.5	15.1	9.8	2.4	0.2								41.8

TABLE XLIV - Continued

TABLE XLIV - Continued														
MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185														
190			0.1											0.1
195														
200														
205														
SUM			0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500 , BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185														
190				0.1										0.1
195														
200														
205														
SUM				0.1										0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.2											0.2
185		0.2	0.5	0.2	0.2									1.1
190														
195														
200														
205														
SUM		0.2	0.7	0.2	0.2									1.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.2											0.2
185			0.6	0.5										1.1
190														
195														
200														
205														
SUM			0.8	0.5										1.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.8	1.2	1.5	0.2	0.3									3.9
185	2.2	5.2	3.7	2.4	0.1									13.5
190		0.1	0.1											0.2
195														
200														
205														
SUM	3.0	6.5	5.2	2.6	0.4									17.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.9	0.3	0.8	1.8										3.9
185	0.8	2.8	6.9	2.6	0.3									13.5
190			0.1	0.1										0.2
195														
200														
205														
SUM	1.7	3.3	7.8	4.5	0.3									17.6

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	3.9	2.3	4.3	3.3	0.8									14.6
185	20.5	10.8	10.0	3.3	0.5	0.1								45.2
190			0.5	0.1										0.6
195	0.6													0.6
200														
205														
SUM	25.0	13.2	14.8	7.6	1.3	0.1								61.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.9													0.9
185	2.1	3.7	3.7	4.1	1.0									14.6
185	1.9	4.2	19.5	16.4	3.2									45.2
190			0.2	0.4										0.6
195			0.6											0.6
200														
205														
SUM	4.9	8.0	23.9	20.9	4.2									61.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180			0.2											0.2
180	1.3	0.7	0.7	0.3	0.1									3.1
185	4.5	3.6	7.3	4.6	0.5									20.5
190	0.5	0.3	0.8	0.5	0.1									2.3
195														
200														
205														
SUM	6.3	4.6	9.0	5.4	0.7									26.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.2													0.2
180	0.6	0.6	1.2	0.7										3.1
185	7.8	2.7	5.1	4.2	0.6	0.1								20.5
190	0.1		0.9	0.9	0.4									2.3
195														
200														
205														
SUM	8.7	3.3	7.2	5.7	0.9	0.1								26.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180														
185	0.3	0.2	0.4	0.2										1.1
190														
195														
200														
205														
SUM	0.3	0.2	0.4	0.2										1.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180														
185	0.4	0.2	0.0		0.5									1.1
190														
195														
200														
205														
SUM	0.4	0.2	0.0		0.5									1.1

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500, BY OAT													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.2	0.9										1.1
180	5.9	4.2	6.7	3.8	1.2									21.8
185	27.5	20.0	21.8	10.7	1.3	0.1								81.4
190	0.5	0.4	1.5	0.6	0.1									3.2
195	0.6													0.6
200														
205														
SUM	34.6	24.6	30.2	16.0	2.6	0.1								108.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1500 , BY OAT													SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.1													1.1
180	3.5	4.8	5.9	6.5	1.0									21.8
185	10.9	10.0	32.1	23.8	4.5	0.1								81.4
190	0.1		1.2	1.5	0.4									3.2
195			0.6											0.6
200														
205														
SUM	15.7	14.8	39.8	31.7	5.9	0.1								108.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														40
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.1											0.1
190														
195														
200														
205														
SUM			0.1											0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 , BY OAT 40													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.1										0.1
190													
195													
200													
205													
SUM			0.1										0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														50
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.7	0.3	0.2										1.2
185	0.1		1.7	0.9	0.2									2.8
190				0.3										0.3
195														
200														
205														
SUM	0.1	0.7	2.0	1.3	0.2									4.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.5		0.7										1.2
185		0.2	0.6	2.1										2.8
190			0.3											0.3
195														
200														
205														
SUM		0.6	0.9	2.8										4.3

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.7	3.0	6.8	2.7	2.1	0.2								15.5
185	2.4	6.0	11.2	8.9	0.9	2.6								31.9
190		0.6	0.1											0.7
195														
200														
205														
SUM	3.1	9.5	18.1	11.6	3.0	2.8								48.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														60
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.4	2.2	5.5	5.5	1.9									15.5
185	0.7	2.0	13.4	10.9	2.8	2.2								31.9
190			0.7											0.7
195														
200														
205														
SUM	1.1	4.2	19.5	16.4	4.7	2.2								48.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.3										0.3
185	5.7	4.1	6.7	8.7	4.9	0.2								30.4
185	27.6	19.6	23.3	21.2	2.7	0.6	0.2		0.1					95.4
190	0.4	0.8	1.2	0.6										3.0
195														
200			0.1	0.2										0.3
205														
SUM	33.8	24.5	31.3	31.1	7.7	0.8	0.2		0.1					129.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														70
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.3											0.3
180	2.4	4.8	6.9	12.7	3.7									30.4
185	3.2	9.1	31.1	35.4	15.7	0.8	0.1							95.4
190	0.2	0.3	1.8	0.7										3.0
195														
200			0.1	0.2										0.3
205														
SUM	5.7	14.2	40.2	49.0	19.4	0.8	0.1							129.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1										0.1
180	3.4	2.1	4.5	1.2	0.7	0.3		0.1						12.4
185	13.8	9.4	14.1	12.6	3.5	0.3	0.3	0.2						54.1
190	0.2	0.5	0.9	0.3										1.8
195														
200														
205														
SUM	17.5	12.0	14.4	14.2	4.2	0.6	0.3	0.3						68.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY OAT														80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1										0.1
180	1.0	3.1	3.8	4.2	0.2		0.1							12.4
185	7.4	8.2	16.3	17.3	3.6	1.1	0.2							54.1
190	0.2	0.1	0.9	0.5	0.2									1.8
195														
200														
205														
SUM	8.6	11.3	20.9	22.1	4.0	1.1	0.3							68.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY QAT 90														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180														
185	0.6	1.2	2.1	1.2	0.1		0.2	0.2						5.6
190	0.2		0.1	0.1										0.4
195														
200														
205														
SUM	0.8	1.2	2.2	1.3	0.1		0.2	0.2						6.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 ,													BY	QAT	90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS																
180																
185	0.5	0.5	1.0	0.3	2.7	0.5	0.1							5.6		
190	0.1	0.1	0.2											0.4		
195																
200																
205																
SUM	0.6	0.6	1.2	0.3	2.7	0.5	0.1							6.0		

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200, BY QAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.4										0.4
180	9.9	9.9	18.3	12.8	7.7	0.7		0.1						59.4
185	44.5	36.2	52.4	44.7	7.5	3.5	0.7	0.4	0.1					189.9
190	0.8	1.9	2.2	1.3										6.2
195														
200			0.1	0.2										0.3
205														
SUM	55.2	47.9	73.1	59.4	15.2	4.2	0.7	0.5	0.1					256.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -1200 ,														BY	QAT	SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS			0.3	0.1										0.4		
180	3.7	10.6	16.1	23.1	5.8		0.1							59.4		
185	11.7	19.9	62.3	66.1	24.8	4.6	0.4							189.9		
190	0.5	0.4	3.8	1.2	0.2									6.2		
195																
200			0.1	0.2										0.3		
205																
SUM	16.0	31.0	82.7	90.7	30.8	4.6	0.5							256.3		

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900, BY QAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190			0.3											0.3
195														
200														
205														
SUM			0.3	0.1										0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900 , BY QAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190				0.3										0.3
195														
200														
205														
SUM				0.4										0.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900, BY OAT 50														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.3			0.2									0.5
185		0.6	0.7	3.3	0.8									5.3
190	0.2	0.1		0.4										0.7
195														
200														
205														
SUM	0.2	0.9	0.7	3.7	1.0									6.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900 , BY OAT 50														
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.2	0.3										0.5
185		0.5	1.4	3.0	0.4									5.3
190		0.4		0.3										0.7
195														
200														
205														
SUM		0.9	1.6	3.5	0.4									6.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1											0.1
180	1.4	1.6	4.9	6.5	9.5	1.3	0.2		0.1					25.6
185	2.8	4.7	16.1	21.2	8.0	0.7	0.2							53.7
190			1.3	0.9										2.2
195														
200														
205														
SUM	4.2	6.4	22.4	28.6	17.4	2.0	0.4		0.1					81.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1											0.1
180	0.3	3.7	10.0	8.0	3.4		0.2							25.6
185	0.5	2.5	18.8	26.2	5.5	0.2								53.7
190			1.8	0.2	0.2									2.2
195														
200														
205														
SUM	0.8	6.2	30.8	34.4	9.1	0.2	0.2							81.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.0			0.6		0.1								0.7
180	10.9	13.8	15.9	19.8	11.4	2.4		0.2	0.1					74.5
185	16.5	18.9	35.8	68.9	20.6	4.1	0.4	0.2		0.1				165.6
190		0.8	1.6	1.7	2.7									6.8
195														
200	0.2		0.5											0.7
205														
SUM	27.6	33.6	53.8	91.1	34.7	6.5	0.4	0.4	0.1	0.1				248.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.7		0.0											0.7
180	3.0	5.9	21.0	33.2	10.8	0.4	0.2							74.5
185	3.5	5.5	39.3	77.2	34.6	4.2	1.3	0.1						165.6
190			3.4	1.4	2.0									6.8
195														
200				0.7										0.7
205														
SUM	7.2	11.4	63.8	112.5	47.4	4.5	1.5	0.1						248.3



TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900, BY OAT											80			
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														36.4
180	6.3	5.1	7.4	13.0	3.3	1.0	0.1	0.1	C.2					127.2
185	25.5	10.9	34.6	37.1	14.9	2.1	1.2	0.7	C.2	0.1				9.2
190	0.5	1.2	4.2	2.5	0.7	0.1								0.1
195	0.1													0.5
200	0.3			0.2										
205														
SUM	32.6	17.2	44.2	52.8	18.8	3.2	1.3	0.8	0.4	0.1				173.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-900 ,		BY OAT		80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS															
180	4.8	6.1	7.3	14.9	2.9	0.2	0.3							36.4	
185	9.3	11.1	36.6	51.3	16.4	1.5	0.8	0.1	0.1					127.2	
190	0.2	0.9	3.0	4.4	0.7									9.2	
195					0.1									0.1	
200				0.5										0.5	
205															
SUM	14.3	18.0	46.9	71.1	20.1	1.7	1.1	0.1	0.1					173.5	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -900,											BY	OAT	90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1											0.1
180	0.1	0.3	0.3	1.3	0.3	0.2	0.1	0.1	C.1	0.1				2.8
185	2.2	1.8	2.9	4.4	0.5	0.5	0.9	0.4	C.4	0.1				13.8
190			0.8	0.4				0.2						1.3
195														
200														
205														
SUM	2.3	2.1	4.1	6.0	0.8	0.8	1.0	0.6	C.5	0.2				18.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													-900 ,	BY	OAT	90	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS	0.1													0.1			
180	0.4	0.9	0.2	0.5	0.3	0.3	0.1	0.2						2.8			
185	1.5	3.0	2.4	2.8	2.5	0.7	0.8	0.2						13.8			
190	0.5	0.3	0.4				0.2							1.3			
195																	
200																	
205																	
SUM	2.5	4.1	2.9	3.3	2.7	1.0	1.2	0.4						18.1			

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB											-900,	BY	OAT	SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.0		0.2	0.6		0.1								0.9
180	18.7	21.1	28.5	40.6	24.7	4.9	0.4	0.4	0.4	0.1				139.9
185	46.9	37.0	90.1	134.9	44.7	7.4	2.7	1.2	0.6	0.3				365.7
190	0.7	2.1	8.2	5.9	3.3	0.1		0.2						20.5
195	0.1													0.1
200	0.5		0.5	0.2										1.1
205														
SUM	66.9	60.1	127.5	182.2	72.7	12.5	3.1	1.8	1.0	0.4				528.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-900	BY	OAT	SUM	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.7		0.1											0.9
180	8.5		38.7	56.9	17.4	0.9	0.8	0.2						139.9
185	14.8	22.5	98.5	160.6	59.5	6.6	2.9	0.4	0.1					365.7
190	0.7	1.6	8.6	6.6	2.9		0.2							20.5
195					0.1									0.1
200				1.1										1.1
205														
SUM	24.8	40.5	145.9	225.1	79.9	7.5	3.9	0.6	0.1					528.3

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			1.7	0.6										2.3
190				0.4										0.4
195														
200														
205														
SUM			1.7	1.0										2.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			1.1	1.2										2.3
190				0.4										0.4
195														
200														
205														
SUM			1.1	1.6										2.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.1												0.1
185			0.7	4.3	1.0									6.0
190				0.3										0.3
195	0.3													0.3
200														
205														
SUM	0.3	0.1	0.7	4.6	1.0									6.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185		0.1	1.5	4.1	0.3									6.0
190				0.3										0.3
195					0.3									0.3
200														
205														
SUM		0.1	1.5	4.5	0.6									6.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.2	1.3	8.7	16.7	15.0	6.0	0.9	0.3						49.0
185	0.8	1.5	13.3	37.3	26.9	3.2	1.4	0.2						84.6
190			0.6	0.3	1.5									2.4
195														
200				0.4										0.4
205														
SUM	1.0	2.7	22.6	54.7	43.4	9.2	2.3	0.5						136.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.2	3.8	12.4	21.3	8.8	1.9	0.6							49.0
185	0.2	1.2	17.2	38.0	24.6	3.3	0.2							84.6
190			0.1	1.8	0.5									2.4
195														
200					0.4									0.4
205														
SUM	0.4	5.0	29.7	61.0	34.3	5.2	0.8							136.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY DAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		0.2	1.0										1.2
180	8.2	10.0	15.2	32.9	16.7	6.3	0.5	0.3	0.3				90.3
185	17.1	14.1	44.0	99.6	94.7	16.6	1.8	1.2	0.3				289.3
190		1.1	0.7	4.0	3.8	1.0							10.5
195				0.4									0.4
200													
205													
SUM	25.3	25.1	60.0	137.9	115.2	23.9	2.3	1.5	0.3				391.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY DAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS		1.0	0.2										1.2
180	1.2	5.3	16.9	41.0	23.6	2.0	0.2	0.1					90.3
185	2.0	3.0	41.4	137.1	84.2	17.4	3.9	0.2					289.3
190		0.1	1.4	3.1	5.9								10.5
195				0.4									0.4
200													
205													
SUM	3.2	8.3	60.7	181.9	113.7	19.4	4.2	0.3					391.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY DAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.2	0.5	0.2	0.4			0.1						1.4
180	6.6	9.6	13.7	17.3	11.2	1.2	1.0	0.5	0.2				61.2
185	24.0	20.0	51.6	94.2	42.6	7.2	3.6	1.9	0.8	0.1	0.1		246.0
190		0.5	2.2	6.8	4.6	0.4	0.2						14.7
195	0.1		0.2										0.3
200	0.1	0.1	0.2	0.4									0.8
205													
SUM	31.1	30.2	68.5	118.8	58.8	8.8	4.8	2.5	1.0	0.1	0.1		324.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY DAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.2	0.6	0.4			0.1							1.4
180	3.5	7.8	13.6	22.3	10.3	0.7	1.0	0.1					61.2
185	9.4	13.4	49.2	116.4	45.2	7.7	2.9	1.7	0.2				246.0
190	0.1		2.3	9.9	2.1	0.2	0.1						14.7
195			0.2	0.1									0.3
200				0.8									0.8
205													
SUM	13.2	21.8	67.7	149.5	57.6	8.6	4.1	1.8	0.2				324.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180	0.6	0.9	0.3	2.8	1.6	0.5	0.8	0.3	0.0				7.8
185	4.2	4.6	9.6	11.2	7.5	2.7	1.0	0.2	0.1				41.1
190			1.0	0.8	0.4	0.2							2.5
195													
200													
205													
SUM	4.8	5.5	10.9	14.8	9.6	3.4	1.8	0.5	0.1				51.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180	0.4	1.5	1.0	1.7	1.3	1.7	0.3	0.0					7.8
185	3.5	4.3	8.7	14.4	6.2	3.0	0.7	0.1	0.0				41.1
190	0.9	0.2	0.6	0.7									2.5
195													
200													
205													
SUM	4.8	6.0	10.3	16.8	7.5	4.7	1.0	0.1	0.1				51.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.2		0.7	1.2	0.4			0.1						2.6
180	15.6		37.9	69.7	44.5	14.0	3.2	1.4	0.3					208.5
185	46.1	40.2	121.0	247.1	172.7	29.6	7.7	3.5	1.2	0.1	0.1			669.2
190		1.6	4.6	12.6	10.3	1.7	0.2							30.9
195	0.4		0.2	0.4										1.0
200	0.1	0.1	0.2	0.8										1.2
205														
SUM	62.4	63.7	164.5	331.8	228.0	45.3	11.1	5.0	1.6	0.1	0.1			913.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -600 , BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.2	0.6	1.4	0.2			0.1							2.6
180	5.3	18.4	45.8	86.4	44.0	6.3	2.1	0.2	0.0					208.5
185	15.1	21.9	119.1	311.1	160.6	31.4	7.7	2.0	0.2					669.2
190	1.0	0.3	4.5	16.2	8.5	0.2	0.1							30.9
195			0.2	0.5	0.3									1.0
200				0.8	0.4									1.2
205														
SUM	21.6	41.3	171.0	415.3	213.7	37.9	10.1	2.2	0.2					913.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT														40
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.1	0.4										0.5
190			0.1											0.1
195														
200														
205														
SUM			0.2	0.4										0.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.1	0.4										0.5
190			0.1											0.1
195														
200														
205														
SUM			0.2	0.4										0.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														-300,	BY	OAT	50
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM			
LESS																	
180																	
185	0.1		0.6	5.7	2.5									8.8			
190				0.3										0.3			
195	0.1													0.1			
200																	
205																	
SUM	0.2		0.6	6.0	2.5									9.3			

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185		0.2	1.1	7.5										8.8
190			0.1	0.2										0.3
195				0.1										0.1
200														
205														
SUM		0.2	1.2	7.8										9.3

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB										-300,	BY OAT		60	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														65.0
180	0.6	0.6	6.2	15.9	26.1	10.6	3.5	0.8	C.					138.8
185	1.9	4.1	20.1	46.3	40.0	23.9	2.4	0.1						1.4
190			0.2	0.7	0.3	0.2								0.1
195				0.1										
200														
205														
SUM	2.5	4.7	26.5	63.0	66.4	34.8	5.9	0.9	0.5					205.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		4.7	10.4	32.5	13.7	2.3	1.2							65.0
185	0.1	1.2	18.1	56.6	47.3	14.3	1.3							138.8
190			0.1	0.9	0.2	0.2								1.4
195					0.1									0.1
200														
205														
SUM	0.1	5.9	28.8	90.0	61.3	16.8	2.5							205.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE UF CLIMB -300, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1	0.6		0.2								0.9
180	7.3	6.6	12.4	47.8	37.4	22.7	8.7	1.4	0.1	0.5				144.9
185	7.2	10.8	51.3	193.4	164.6	98.8	11.8	3.0						500.7
190	0.1	0.1	0.6	3.4	10.8	1.3								16.2
195														
200														
205														
SUM	14.6	17.4	64.4	245.1	212.8	82.9	20.5	4.4	0.1	0.5				662.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.3	0.1		0.5										0.9
180	0.8	5.0	15.9	47.6	62.3	7.3	4.8	1.0	0.2					144.9
185	0.5	3.0	34.0	198.7	203.4	51.1	9.2	0.8						500.7
190			0.7	2.8	8.6	3.8	0.5							16.2
195														
200														
205														
SUM	1.6	8.1	50.5	249.7	274.3	62.1	14.5	1.8	0.2					662.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				1.5	1.3			0.1						2.9
180	6.5	7.5	17.4	19.4	14.5	10.4	3.3	1.6	1.5	0.1				82.1
185	16.4	17.1	50.5	126.9	97.5	38.5	12.9	3.1	0.8	0.8				364.6
190	0.3	0.6	2.8	20.2	11.8	3.0				0.1				38.8
195	0.5	0.2	0.3											1.0
200			0.1											0.1
205														
SUM	23.7	25.4	71.0	168.1	125.0	51.9	16.2	4.8	2.3	1.0				489.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB														-300 ,	BY	OAT	80	
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM				
LESS	0.7	0.9	0.7	0.6			0.1							2.9				
180	3.1	6.7	21.4	25.0	17.0	5.6	2.4	0.9						82.1				
185	5.4	9.4	48.0	136.2	119.1	31.3	12.9	2.0	0.2					364.6				
190			2.8	19.7	15.2	1.0								38.8				
195				0.7	0.3									1.0				
200				0.1										0.1				
205																		
SUM	9.2	16.9	73.0	182.3	151.7	37.9	15.4	2.9	0.2					489.4				

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.4	0.7	0.7	6.7	5.1	4.0	1.7	0.2	0.1	0.1	0.1			19.7
185	3.6	4.1	12.1	19.3	22.1	9.6	6.2	3.3	1.4	0.1				81.8
190		0.4	0.8	1.8	0.9	0.7								4.5
195														
200														
205														
SUM	3.9	5.2	13.5	27.9	28.2	14.2	7.9	3.4	1.5	0.2	0.1			106.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.8	3.8	3.5	6.3	3.2	0.9	1.0	0.1	0.1					19.7
185	2.9	4.0	8.7	26.6	20.2	9.5	6.9	2.8	0.2					81.8
190	0.7	0.7	0.3	1.6	0.2	0.4	0.7							4.5
195														
200														
205														
SUM	4.3	8.5	12.5	34.5	23.7	10.8	8.6	2.9	0.3					106.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS			0.1	2.1	1.3	0.2		0.1						3.8
180	14.7	15.4	36.7	89.8	83.1	47.7	17.2	4.0	2.2	0.7	0.1			311.6
185	29.2	36.0	134.6	392.0	326.7	130.8	33.3	9.5	2.2	0.9				1095.3
190	0.4	1.1	4.5	26.4	23.8	5.2				0.1				61.4
195	0.6	0.2	0.3	0.1										1.2
200			0.1											0.1
205														
SUM	49.0	52.7	176.3	510.4	434.9	183.9	50.5	13.6	4.4	1.6	0.1			1473.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB -300 , BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	1.0	1.0	0.7	1.1			0.1							3.8
180	4.7	20.2	51.3	111.5	96.3	16.0	9.4	2.0	0.3					311.6
185	8.8	17.8	110.0	426.0	390.0	106.2	30.3	5.7	0.4					1095.3
190	0.7	0.7	4.1	25.2	24.2	5.3	1.1							61.4
195				0.8	0.4									1.2
200				0.1										0.1
205														
SUM	15.2	39.6	166.1	564.7	510.9	127.5	40.9	7.6	0.7					1473.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.4										0.4
190														
195														
200														
205														
SUM				0.4										0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY UAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.2	0.2										0.4
190														
195														
200														
205														
SUM			0.2	0.2										0.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														1.1
180				0.4	0.6	0.1								4.0
185			1.2	1.5	0.5	0.7	0.1							0.1
190				0.1										
195														
200														
205														
SUM			1.2	2.0	1.1	0.8	0.1							5.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.4	0.7									1.1
185			0.7	1.5	1.2	0.6								4.0
190				0.1										0.1
195														
200														
205														
SUM			0.7	2.0	1.9	0.6								5.1

MINUTES FOR TORQUE VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.1	0.1	0.3	0.5	0.5	0.6	0.1						2.1
185	0.2		0.5	4.3	2.9	1.0	0.7		0.1					9.8
190					0.3	0.1								0.4
195														
200														
205														
SUM	0.2	0.1	0.6	4.6	3.7	1.6	1.3	0.1	0.1					12.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180		0.1	0.1	0.1	1.4	0.3	0.1							2.1
185			0.8	3.4	4.3	1.0	0.2							9.8
190					0.4									0.4
195														
200														
205														
SUM		0.1	0.9	3.5	6.1	1.4	0.3							12.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180	0.1	0.1	0.7	0.2	0.2		0.1							1.3
185	0.2	0.4	1.4	3.1	3.4	0.9	0.6	0.3						10.3
190				0.7		0.2								0.9
195														
200														
205														
SUM	0.3	0.5	2.1	4.0	3.6	1.1	0.7	0.3						12.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY OAT 80													SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS														1.3
180	0.2	0.2	0.8	0.1		0.1								10.3
185		0.8	4.0	4.2	0.9	0.4								0.9
190	0.1		0.7		0.1									
195														
200														
205														
SUM	0.3	1.0	5.5	4.3	1.0	0.5								12.5

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.1										0.1
180				0.2	0.3	0.1	0.1			0.1				0.8
185		0.1	0.1	0.6	0.3	0.3	0.2	0.9						2.4
190				0.1		0.1	0.1							0.3
195														
200														
205														
SUM		0.1	0.1	1.0	0.6	0.5	0.4	0.9		0.1				3.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180		0.1	0.3	0.2			0.1	0.1						0.8
185	0.1		0.1	0.7	0.3	1.2	0.1							2.4
190	0.1				0.2	0.1								0.3
195														
200														
205														
SUM	0.3	0.1	0.4	0.9	0.4	1.2	0.2	0.1						3.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300, BY OAT											SUM			
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.1										0.1
180	0.1	0.2	0.8	1.1	1.5	0.7	0.8	0.1		0.1				5.4
185	0.4	0.5	3.3	9.9	7.0	2.9	1.5	1.2	0.1					26.8
190				0.9	0.3	0.4	0.1							1.7
195														
200														
205														
SUM	0.5	0.7	4.0	12.0	8.9	4.0	2.4	1.3	0.1	0.1				34.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 300 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS	0.1													0.1
180		0.4	0.6	1.4	2.2	0.3	0.3	0.1						5.4
185	0.1		2.6	9.9	9.9	3.7	0.7							26.8
190	0.1	0.1		0.8	0.5	0.1								1.7
195														
200														
205														
SUM	0.3	0.5	3.2	12.1	12.6	4.1	1.0	0.1						34.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
100					0.1	0.1								0.2
105			0.1	0.5	0.7									1.3
190														
195														
200														
205														
SUM			0.1	0.5	0.8	0.1								1.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1	0.1									0.2
185			0.2	0.2	0.8	0.1								1.3
190														
195														
200														
205														
SUM			0.2	0.3	0.9	0.1								1.5



TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180				0.1	0.2			0.1						0.4
185	0.1			0.5	0.6	0.1	0.1	0.1						1.5
190														
195														
200														
205														
SUM	0.1			0.6	0.8	0.1	0.1	0.2						1.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 70														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180				0.2	0.1	0.1								0.4
185			0.1	0.4	0.9		0.1							1.5
190														
195														
200														
205														
SUM			0.1	0.6	1.0	0.1	0.1							1.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180					0.2									0.2
185	0.1	0.1	0.2	0.8	0.6	0.1								1.8
190		0.0	0.0	0.1										0.2
195														
200														
205														
SUM	0.1	0.1	0.2	0.9	0.8	0.1								2.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 80														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180	0.1			0.1										0.2
185			0.3	0.7	0.7	0.2								1.8
190			0.1	0.1										0.2
195														
200														
205														
SUM	0.1		0.4	0.9	0.7	0.2								2.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180				0.1			0.1	0.1						0.3
185				0.1	0.1	0.1	0.2							0.5
190														
195														
200														
205														
SUM				0.2	0.1	0.1	0.3	0.1						0.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 600, BY OAT 90														SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120	
180				0.1		0.2								0.3
185				0.2	0.1	0.1	0.1							0.5
190														
195														
200														
205														
SUM				0.3	0.1	0.3	0.1							0.8

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													600,	BY	OAT	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM
180				0.2	0.3	0.1	0.1	0.2								1.1
185	0.2	0.1	0.3	1.0	2.0	0.3	0.3	0.1								5.1
190		0.0	0.0	0.1												0.2
195																
200																
205																
SUM	0.2	0.1	0.3	2.1	2.5	0.4	0.4	0.3								6.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													600,	BY	OAT	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM
180	0.1			0.5	0.2	0.3										1.1
185			0.6	1.5	2.5	0.4	0.2									5.1
190			0.1	0.1												0.2
195																
200																
205																
SUM	0.1		0.7	2.1	2.7	0.7	0.2									6.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													900,	BY	OAT	80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM
180																
185				0.1			0.1									0.2
190																
195																
200																
205																
SUM				0.1			0.1									0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													900,	BY	OAT	80
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM
180																
185					0.1		0.1									0.2
190																
195																
200																
205																
SUM					0.1		0.1									0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													900,	BY	OAT	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM
180																
185				0.1			0.1									0.2
190																
195																
200																
205																
SUM				0.1			0.1									0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB													900,	BY	OAT	SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	100	110	120			SUM
180																
185					0.1		0.1									0.2
190																
195																
200																
205																
SUM					0.1		0.1									0.2

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 1200, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.1										0.1
190													
195													
200													
205													
SUM			0.1										0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 1200 , BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185				0.1									0.1
190													
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 1200, BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.1										0.1
190													
195													
200													
205													
SUM			0.1										0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG DESCNT, BY RATE OF CLIMB 1200 , BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185				0.1									0.1
190													
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -1200, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
ESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -1200 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
ESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -1200, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.1										0.1
190													
195													
200													
205													
SUM			0.1										0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -1200 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -1200, BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180														
185			0.2										0.2	
190														
195														
200														
205														
SUM			0.2										0.2	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -1200 , BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180														
185			0.2										0.2	
190														
195														
200														
205														
SUM			0.2										0.2	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT 50													SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180														
185			0.2	0.2										0.4
190														
195														
200														
205														
SUM			0.2	0.2										0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.4										0.4
190														
195														
200														
205														
SUM				0.4										0.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY DAT 60													SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS														
180			0.2											0.2
185			0.9	0.8	0.2									1.9
190														
195														
200														
205														
SUM			1.1	0.8	0.2									2.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY DAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1	0.1									0.2
185				0.9	0.9	0.1								1.9
190														
195														
200														
205														
SUM				1.0	1.0	0.1								2.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1	0.4	0.1		0.1						0.7
185				0.7	0.7	0.2								1.5
190														
195														
200														
205														
SUM				0.8	1.1	0.3		0.1						2.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.2	0.4		0.1							0.7
185				0.7	0.7	0.2								1.5
190														
195														
200														
205														
SUM				0.9	1.1	0.2	0.1							2.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1	0.1		0.1								0.3
185				0.3	0.2	0.2	0.1							0.8
190				0.1										0.1
195														
200														
205														
SUM			0.1	0.5	0.2	0.3	0.1							1.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY DAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.2		0.1								0.3
185		0.1	0.2	0.4		0.1							0.8
190			0.1										0.1
195													
200													
205													
SUM		0.1	0.5	0.4	0.1	0.1							1.2

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180						0.1								0.1
185				0.1		0.1	0.2							0.3
190														
195														
200														
205														
SUM				0.1		0.2	0.2							0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185				0.1		0.2								0.3
190														
195														
200														
205														
SUM				0.2		0.2								0.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900, BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180		0.1	0.4	0.4	0.3		0.1						1.3
185			2.2	1.9	0.6	0.2							5.0
190			0.1										0.1
195													
200													
205													
SUM		0.1	2.7	2.3	1.0	0.2	0.1						6.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -900 , BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS													
180			0.6	0.5	0.1	0.1							1.3
185		0.1	2.3	2.0	0.4	0.1							5.0
190			0.1										0.1
195													
200													
205													
SUM		0.1	3.0	2.5	0.5	0.2							6.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.6	0.2									0.8
190														
195														
200														
205														
SUM				0.6	0.2									0.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.8										0.8
190														
195														
200														
205														
SUM				0.8										0.8

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT														50
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.0										0.0
185				2.2	0.8									3.0
190														
195														
200														
205														
SUM				2.2	0.8									3.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.0										0.0
185			0.6	2.4										3.0
190														
195														
200														
205														
SUM			0.6	2.4										3.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				2.7	0.6	0.4								3.7
185			0.5	4.8	3.5	1.1								9.9
190														
195														
200														
205														
SUM			0.5	7.5	4.2	1.5								13.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.3	1.1	2.3									3.7
185		0.7	4.3	4.3	0.6								9.9
190													
195													
200													
205													
SUM		1.0	5.4	6.6	0.6								13.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1	2.2	3.1	1.4	0.6	0.3						7.7
185			0.6	6.0	5.6	2.5	1.1	0.3						16.1
190				0.1	0.6	0.1								0.8
195														
200														
205														
SUM			0.7	8.3	9.3	4.0	1.7	0.6						24.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.7	1.8	4.2	0.6	0.4							7.7
185			1.5	4.3	7.5	2.4	0.4							16.1
190				0.4	0.4									0.8
195														
200														
205														
SUM			2.2	6.5	12.1	3.0	0.8							24.5

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY DAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS					0.4								0.4
180			0.4	0.8	0.6	0.1							1.8
185	0.3	0.8	5.4	2.7	1.2	0.7		0.1					11.2
190			0.5	0.2	0.2								0.9
195													
200													
205													
SUM	0.3	0.8	6.3	3.6	2.4	0.8		0.1					14.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY DAT 80													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.4									0.4
180			0.4	0.8	0.4	0.3							1.8
185		1.4	3.5	4.5	1.4	0.3	0.1						11.2
190			0.5	0.4									0.9
195													
200													
205													
SUM		1.4	4.4	6.1	1.8	0.6	0.1						14.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY DAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.1									0.1
180				0.1	0.1	0.1	0.1	0.2					0.5
185			0.1		0.3	0.3	0.1	0.2					1.0
190													
195													
200													
205													
SUM			0.1	0.2	0.4	0.3	0.2	0.4					1.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY DAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.1									0.1
180				0.2	0.2	0.1							0.5
185			0.3	0.3	0.1	0.1	0.2						1.0
190													
195													
200													
205													
SUM			0.3	0.6	0.3	0.2	0.2						1.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -600, BY DAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.1	0.4								0.5
180		0.1	5.3	4.6	2.4	0.7	0.4	0.1					13.7
185	0.3	1.9	19.1	12.8	5.2	2.1	0.4	0.1					42.0
190			0.6	0.8	0.3								1.7
195													
200													
205													
SUM	0.3	2.0	25.0	18.3	8.3	2.8	0.6	0.2					56.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -500, BY DAT SUM													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS				0.5									0.5
180		1.0	3.3	7.5	1.2	0.8							13.7
185		4.2	15.5	16.6	4.5	0.8	0.3						42.0
190			0.9	0.8									1.7
195													
200													
205													
SUM		5.2	19.7	25.4	5.7	1.6	0.3						58.0



TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				12.9	4.0									16.9
190				0.5										0.5
195														
200														
205														
SUM				13.4	4.0									17.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY OAT 40														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185			0.3	16.6										16.9
190			0.2	0.3										0.5
195														
200														
205														
SUM			0.5	16.9										17.4

MINUTES FOR TORQUE VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS				0.2										0.2
180				29.0	0.5		0.4							34.9
185			2.2	60.0	24.0									91.2
190														
195														
200														
205														
SUM			12.2	89.3	24.5		0.4							126.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS					0.2									0.2
180			1.3	17.1	16.0		0.4							34.9
185			6.5	83.6	1.0									91.2
190														
195														
200														
205														
SUM			7.9	100.8	17.2		0.4							126.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.4								0.4
180		0.4	7.0	90.0	92.5	31.8	27.0	2.0						250.6
185			19.3	282.0	260.0	196.7	39.4	0.9						798.4
190				4.2	0.5	0.6								5.2
195														
200														
205														
SUM		0.4	26.2	376.2	352.9	229.5	66.4	2.9						1054.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS						0.4								0.4
180			9.2	103.9	99.0	31.9	6.5							250.6
185			61.7	263.3	332.5	128.2	12.4	0.2						798.4
190			1.4	3.3	0.5									5.2
195														
200														
205														
SUM			72.3	370.6	432.0	160.5	18.9	0.2						1054.5

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 70													
	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
LESS		0.4				3.7							4.1
180		0.1	7.3	107.1	110.7	112.2	27.6	6.0	1.1				372.0
185			35.4	460.2	477.5	263.0	105.3	8.8	0.1				1350.6
190			1.0	15.1	23.7	9.2	0.3						49.3
195					3.2								3.2
200					1.4								1.4
205													
SUM		0.5	43.7	582.4	616.6	388.0	133.2	14.7	1.1				1780.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 70													
	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
LESS					0.8	3.3							4.1
180		0.8	12.9	118.1	190.6	40.4	5.7	2.5	1.0				372.0
185			68.5	376.8	616.1	200.4	85.3	3.6					1350.6
190			2.3	18.2	20.9	6.5	1.4						49.3
195					3.2								3.2
200					1.4								1.4
205													
SUM		0.8	83.8	513.1	833.0	250.5	92.4	6.1	1.0				1780.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 80													
	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
LESS				0.1	0.8	0.1							1.0
180	1.4	4.3	3.1	20.1	38.7	37.3	12.2	1.6	2.7	0.5			122.0
185	0.4	0.8	19.5	170.2	179.1	88.0	18.1	6.9	3.0	1.7			487.6
190			0.3	16.4	9.0	5.0	2.2						32.9
195													
200													
205													
SUM	1.8	5.1	22.9	206.8	227.6	130.4	32.4	8.4	5.7	2.2			643.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 80													
	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
LESS				0.1	0.9								1.0
180	0.1	2.3	6.6	29.3	45.0	30.4	6.2	1.7	0.4				122.0
185	0.8	0.3	17.0	174.4	176.9	94.4	15.4	4.9	3.5				487.6
190			0.3	14.9	14.3	1.0	2.2	0.1					32.9
195													
200													
205													
SUM	0.9	2.5	24.0	219.5	236.2	125.9	23.8	6.8	3.9				643.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 90													
	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
LESS					1.5								1.5
180	0.8	0.2	0.5	3.2	12.5	4.0	3.0	0.1	2.9				27.2
185	0.8	1.3	3.7	27.1	41.7	28.9	7.6	5.5	2.5	3.2	1.1	0.1	123.4
190			1.4	1.5	2.4	0.5							5.9
195													
200													
205													
SUM	1.6	1.5	5.6	31.8	58.1	33.4	10.5	5.7	5.4	3.2	1.1	0.1	158.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT 90													
	LESS	10	20	30	40	50	60	70	80	90	100	110	120 SUM
LESS					1.5								1.5
180	0.5	0.8	2.9	7.0	9.7	3.3	2.6	0.1	0.1	0.1			27.2
185	1.1	0.8	4.2	46.5	43.2	9.1	12.7	3.6	0.9	1.3			123.4
190			0.8	4.4	0.7								5.9
195													
200													
205													
SUM	1.6	1.6	7.8	59.5	53.7	12.5	15.3	3.7	1.0	1.4			158.0

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.4	0.3	2.4	4.2	6.8	9.7	12.6	15.5	18.4	21.3	24.2	27.1	7.2
185	2.3	5.0	22.8	249.4	254.9	185.2	70.1	9.7	6.8	0.5	1.1	0.1	806.6
190	1.2	2.0	85.1	1012.5	986.3	576.7	170.4	22.1	5.9	4.9	1.1	0.1	2868.1
195		2.7	37.6	35.6	15.3	2.5							93.7
200				3.2									3.2
205				1.4									1.4
SUM	3.4	7.4	110.7	1299.8	1283.7	761.3	242.9	31.8	12.6	5.4	1.1	0.1	3780.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB -300, BY OAT													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.1	2.4	1.0	3.7	6.8	9.7	12.6	15.5	18.4	21.3	24.2	27.1	7.2
185	0.6	3.8	33.0	275.5	360.4	106.0	21.3	4.3	1.5	0.1			806.6
190	1.9	1.1	158.3	941.2	1169.8	432.1	125.8	12.3	4.4	1.3			2868.1
195		4.9	41.1	36.4	7.6	3.6	0.1						93.7
200				3.2									3.2
205				1.4									1.4
SUM	2.5	4.9	196.3	1280.3	1572.1	549.4	150.8	16.7	5.9	1.4			3780.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT													40
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.3									0.3
185				0.1									0.1
190													
195													
200													
205													
SUM				0.4									0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT													40
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.3									0.3
185				0.1									0.1
190													
195													
200													
205													
SUM				0.4									0.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT													50
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.1
185		0.1	1.7	1.0									2.8
190													
195													
200													
205													
SUM		0.1	1.7	1.1									2.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT													50
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1									0.1
185		0.2	2.6										2.8
190													
195													
200													
205													
SUM		0.2	2.6	0.1									2.9

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 50													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			1.5	2.0	0.1	0.3	0.1						3.9
185		0.1	5.9	3.8	2.9	0.5							13.1
190													
195													
200													
205													
SUM		0.1	7.4	5.7	3.0	0.8	0.1						17.0

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			1.8	2.0	0.1								3.9
185		0.8	4.4	7.1	0.7	0.1							13.1
190													
195													
200													
205													
SUM		0.8	6.3	9.1	0.8	0.1							17.0

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.2	2.0	2.6	1.0	0.4	0.1	0.3					6.6
185		0.7	9.1	9.3	4.7	2.0	0.2						22.0
190			1.3	0.2	0.2								1.7
195													
200													
205													
SUM		0.9	12.4	8.0	5.9	2.4	0.3	0.3					30.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			1.6	3.2	1.5		0.1	0.2					6.6
185	0.2	1.3	6.8	10.5	2.7	0.6							22.0
190		0.2	1.3	0.2									1.7
195													
200													
205													
SUM	0.2	1.5	9.6	13.9	4.2	0.6	0.1	0.2					30.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180	0.3		0.7	1.4	0.1								2.4
185		0.4	3.5	2.5	2.0	0.4							8.8
190			0.4	0.1									0.5
195													
200													
205													
SUM	0.3	0.4	4.6	4.0	2.1	0.4							11.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.2	0.7	0.7	0.3	0.6							2.4
185		0.5	3.3	3.0	1.4	0.4		0.1					8.8
190			0.3	0.2									0.5
195													
200													
205													
SUM		0.7	4.3	3.9	1.7	1.0		0.1					11.7

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180	0.4		0.1										0.5
185		0.0	0.0		0.3		0.1	0.4		0.1			0.8
190													
195													
200													
205													
SUM	0.4	0.0	0.1		0.3		0.1	0.2		0.1			1.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180			0.5										0.5
185		0.1		0.1	0.4		0.1		0.1				0.8
190													
195													
200													
205													
SUM		0.1	0.5	0.1	0.4		0.1		0.1				1.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180	0.7	0.2	4.2	6.0	1.2	0.7	0.2	0.3					13.6
185		1.3	20.2	12.8	9.9	2.9	0.3	0.2		0.1			47.8
190			1.7	0.4	0.2								2.3
195													
200													
205													
SUM	0.7	1.5	26.1	19.2	11.3	3.7	0.5	0.5		0.1			63.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 300, BY OAT 90													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180		0.2	4.6	6.0	1.9	0.6	0.1	0.2					13.6
185	0.2	2.9	17.4	20.7	5.2	1.1	0.1	0.1	0.1				47.8
190		0.2	1.7	0.4									2.3
195													
200													
205													
SUM	0.2	3.3	23.7	27.1	7.1	1.7	0.2	0.3	0.1				63.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 40													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180													
185			0.1										0.1
190			0.1										0.1
195													
200													
205													
SUM			0.2										0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 40													SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	
LESS													
180													
185		0.1											0.1
190		0.1											0.1
195													
200													
205													
SUM		0.2											0.2

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 50													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.2	0.1									0.3
190													
195													
200													
205													
SUM			0.2	0.1									0.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY OAT 50														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.3										0.3
190														
195														
200														
205														
SUM				0.3										0.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.2	0.1									0.3
185			0.1	1.0	1.2	0.4	0.1							2.8
190					0.1									0.1
195														
200														
205														
SUM			0.1	1.2	1.4	0.4	0.1							3.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.3										0.3
185			0.3	1.2	1.3									2.8
190					0.1									0.1
195														
200														
205														
SUM			0.3	1.5	1.4									3.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.5		0.1	0.1	0.1					0.8
185			0.2	1.5	0.9	0.1	0.1							2.7
190				0.1										0.1
195														
200														
205														
SUM			0.2	1.6	1.4	0.1	0.2	0.1	0.1					3.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.6	0.2								0.8
185			0.3	1.5	0.7	0.2	0.1							2.7
190			0.1											0.1
195														
200														
205														
SUM			0.4	1.5	1.3	0.4	0.1							3.6

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185				0.8	0.1	0.5	0.2							1.6
190				0.1										0.1
195														
200														
205														
SUM				1.0	0.1	0.5	0.2							1.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1										0.1
185				0.8	0.6		0.2							1.6
190					0.1									0.1
195														
200														
205														
SUM				0.9	0.7		0.2							1.8

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1									0.1
185					0.2	0.1		0.1						0.4
190						0.1								0.1
195														
200														
205														
SUM					0.3	0.2		0.1						0.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180			0.1											0.1
185				0.2		0.1		0.1						0.4
190					0.1									0.1
195														
200														
205														
SUM			0.1	0.2	0.1	0.1		0.1						0.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB										600,	BY	OAT	SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.3	0.7		0.1	0.1	0.1					1.3
185		0.3	3.6	2.5	1.1	0.4	0.1						7.9
190			0.3	0.1	0.1								0.5
195													
200													
205													
SUM		0.3	4.1	3.3	1.2	0.5	0.2	0.1					9.7

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG STEADY, BY RATE OF CLIMB 600 , BY OAT												SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180		0.1	0.4	0.6	0.2								1.3
185		0.7	4.0	2.5	0.3	0.3	0.1						7.9
190		0.2		0.3									0.5
195													
200													
205													
SUM		1.0	4.4	3.5	0.5	0.3	0.1						9.7

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -1200, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1	0.1								0.1
190														
195														
200														
205														
SUM					0.1	0.1								0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -1200 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1	0.1								0.1
190														
195														
200														
205														
SUM					0.1	0.1								0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -1200, BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185								0.1						0.1
190														
195														
200														
205														
SUM								0.1						0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -1200 , BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185										0.1				0.1
190														
195														
200														
205														
SUM										0.1				0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -1200, BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1	0.1		0.1						0.2
190														
195														
200														
205														
SUM					0.1	0.1		0.1						0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -1200 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1	0.1				0.1				0.2
190														
195														
200														
205														
SUM					0.1	0.1				0.1				0.2



TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -900, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180							0.1	0.1					0.1
185					0.1	0.1	0.1						0.2
190					0.1								0.1
195													
200													
205													
SUM					0.1	0.1	0.1	0.1					0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -900 , BY OAT 70														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180					0.1	0.1								0.1
185				0.1	0.1	0.1								0.2
190				0.1										0.1
195														
200														
205														
SUM				0.1	0.1	0.1								0.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -900, BY OAT 80														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180						0.1							0.1	
185				0.1	0.3		0.1		0.1				0.6	
190														
195														
200														
205														
SUM				0.1	0.3	0.1	0.1		0.1				0.7	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -900 , BY OAT 80														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180				0.1										0.1
185				0.5			0.1							0.6
190														
195														
200														
205														
SUM				0.6			0.1							0.7

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -900, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180										0.1			0.1
185				0.1	0.1		0.2						0.3
190													
195													
200													
205													
SUM				0.1	0.1		0.2			0.1			0.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -900 , BY OAT 90														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180							0.1							0.1
185				0.1	0.1	0.2								0.3
190														
195														
200														
205														
SUM				0.1	0.1	0.2	0.1							0.4

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HCIST, BY RATE OF CLIMB -900, BY OAT														SUM
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180							0.1	0.1	0.1		0.1			0.3
185					0.2	0.4	0.1	0.3		0.1				1.1
190						0.1								0.1
195														
200														
205														
SUM					0.2	0.4	0.2	0.4	0.1	0.1	0.1			1.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -900, BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
LESS														
180				0.1	0.1	0.1	0.1						0.3	
185				0.7	0.1	0.2	0.1						1.1	
190				0.1									0.1	
195														
200														
205														
SUM				0.8	0.2	0.3	0.2						1.5	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -600, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185						0.1								0.1
190														
195														
200														
205														
SUM						0.1								0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HCIST, BY RATE OF CLIMB -600 , BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1									0.1
190														
195														
200														
205														
SUM					0.1									0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HCIST, BY RATE OF CLIMB -600, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.1		0.1						0.1
185						0.2	0.1	0.1					0.4
190													
195													
200													
205													
SUM					0.1	0.2	0.2	0.1					0.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HCIST, BY RATE OF CLIMB -600 , BY OAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180						0.1	0.1							0.1
185					0.2		0.1	0.1						0.4
190														
195														
200														
205														
SUM					0.2	0.1	0.2	0.1						0.5

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -600, BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1	0.1	0.3	0.3		0.1				0.9
190								0.1						0.1
195														
200														
205														
SUM					0.1	0.1	0.3	0.4		0.1				0.9

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -600 , BY OAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.2	0.2	0.2	0.2	0.1					0.9
190							0.1							0.1
195														
200														
205														
SUM					0.2	0.2	0.2	0.2	0.1					0.9

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -600, BY OAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180						0.2							0.2
185					0.1	0.2							0.3
190													
195													
200													
205													
SUM					0.1	0.4							0.5

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -600 , BY OAT 90														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
180					0.2									0.2
185				0.1	0.1									0.3
190														
195														
200														
205														
SUM				0.1	0.3									0.5

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -600, BY OAT														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM	
180					0.1	0.2	0.1						0.3	
185				0.1	0.2	0.0	0.4	0.1	0.1				1.7	
190							0.1						0.1	
195														
200														
205														
SUM				0.1	0.3	1.0	0.5	0.1	0.1				2.0	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -600 , BY OAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.2	0.1							0.3
185				0.7	0.3	0.3	0.3	0.1					1.7
190						0.1							0.1
195													
200													
205													
SUM				0.7	0.5	0.4	0.3	0.1					2.0

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -300, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.1	0.1		0.1					0.2
185													
190													
195													
200													
205													
SUM					0.1	0.1		0.1					0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -300, BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.2								0.2
185													
190													
195													
200													
205													
SUM					0.2								0.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -300, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180					0.1	0.2	0.1		0.1				0.4
185				0.1	0.1	0.1	0.1	0.4					0.8
190													
195													
200													
205													
SUM				0.1	0.2	0.3	0.2	0.4	0.1				1.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -300, BY OAT 70													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1	0.2	0.1		0.1					0.4
185		0.0	0.1	0.2	0.3	0.1							0.8
190													
195													
200													
205													
SUM		0.0	0.1	0.3	0.5	0.2		0.1					1.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -300, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180				0.1	0.5	0.1	0.2						0.4
185	0.1		0.1	0.1	0.5	1.4	0.6	0.2	0.1				3.2
190					0.1	0.1							0.2
195													
200													
205													
SUM	0.1		0.1	0.2	0.6	1.6	0.8	0.2	0.1				3.8

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB -300, BY OAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180			0.1		0.1	0.1	0.1						0.4
185		0.1		0.8	1.4	0.7	0.2						3.2
190					0.2								0.2
195													
200													
205													
SUM		0.1	0.1	0.8	1.7	0.8	0.3						3.8

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -300. BY OAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1	0.3	0.3	0.3	0.2	0.1					1.4
190														
195														
200														
205														
SUM				0.1	0.3	0.3	0.3	0.2	0.1					1.4

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -300 , BY OAT 90														SUM
LESS	10	20	30	40	50	60	70	80	90	100	110	120		
LESS														
180														
185			0.2	0.3	0.2	0.3	0.2	0.1						1.4
190														
195														
200														
205														
SUM			0.2	0.3	0.2	0.3	0.2	0.1						1.4

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -300, BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180					0.1	0.1	0.2	0.3		0.1				0.8
185		0.1		0.2	0.5	0.9	2.0	0.9	0.9	0.1				5.5
190						0.1	0.1							0.2
195														
200														
205														
SUM		0.1		0.2	0.6	1.1	2.3	1.2	0.9	0.1				6.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB -300 , BY OAT SUM														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180				0.1	0.1	0.3	0.2	0.1	0.1					0.8
185			0.1	0.3	1.4	2.1	1.1	0.4	0.1					5.5
190						0.2								0.2
195														
200														
205														
SUM			0.1	0.4	1.4	2.6	1.3	0.5	0.1					6.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB 300, BY OAT 60														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1			0.1							0.2
190														
195														
200														
205														
SUM				0.1			0.1							0.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB 300 , BY OAT 60													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185				0.1		0.1							0.2
190													
195													
200													
205													
SUM				0.1		0.1							0.2

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB 300, BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185						0.1	0.1	0.1						0.3
190														
195														
200														
205														
SUM						0.1	0.1	0.1						0.3

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB 300 , BY DAT 70														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1	0.1	0.1	0.1							0.3
190														
195														
200														
205														
SUM				0.1	0.1	0.1	0.1							0.3

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB 300, BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185						0.2	0.2		0.1					0.6
190														
195														
200														
205														
SUM						0.2	0.2		0.1					0.6

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB 300 , BY DAT 80														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185					0.1	0.4		0.1						0.6
190														
195														
200														
205														
SUM					0.1	0.4		0.1						0.6

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST , BY RATE OF CLIMB 300, BY DAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG - HOIST , BY RATE OF CLIMB 300 , BY DAT 90														
	LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
LESS														
180														
185				0.1										0.1
190														
195														
200														
205														
SUM				0.1										0.1

TABLE XLIV - Continued

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HC151 , BY RATE OF CLIMB 300, BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.2		0.2	0.4	0.1	0.1					1.2
190													
195													
200													
205													
SUM			0.2		0.2	0.4	0.1	0.1					1.2

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HC151 , BY RATE OF CLIMB 300 , BY DAT SUM													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185			0.2	0.3	0.5	0.2	0.1						1.2
190													
195													
200													
205													
SUM			0.2	0.3	0.5	0.2	0.1						1.2

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HC151 , BY RATE OF CLIMB 600, BY DAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185													
190						0.1							0.1
195													
200													
205													
SUM						0.1							0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HC151 , BY RATE OF CLIMB 600 , BY DAT 80													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185													
190						0.1							0.1
195													
200													
205													
SUM						0.1							0.1

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HC151 , BY RATE OF CLIMB 600, BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185													
190				0.1									0.1
195													
200													
205													
SUM				0.1									0.1

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HC151 , BY RATE OF CLIMB 600 , BY DAT 90													
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM
180													
185													
190			0.1										0.1
195													
200													
205													
SUM			0.1										0.1

TABLE XLIV - Concluded

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600, BY OAT SUM														SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS															
180															
185															
190				0.1		0.1								0.2	
195															
200															
205															
SUM				0.1		0.1								0.2	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG HOIST, BY RATE OF CLIMB 600, BY OAT SUM														SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS															
180															
185															
190			0.1		0.1									0.2	
195															
200															
205															
SUM			0.1		0.1									0.2	

MINUTES FOR TORQUE1 VS RPM BY MISSION SEG SUM, BY RATE OF CLIMB SUM, BY OAT SUM														SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS	0.7	1.1	1.3	7.5	6.0	8.2		0.2						25.0	
180	75.4	86.3	168.6	569.2	597.4	395.6	199.4	76.0	26.1	6.8	0.6			2201.5	
185	222.2	187.5	545.3	2259.7	2192.8	1273.1	580.1	194.9	54.0	12.7	2.1	0.1		7525.4	
190	3.6	7.5	25.5	105.4	178.5	56.4	16.0	2.5	2.2	0.1				347.6	
195	1.8	0.2	0.5	0.5	5.9									8.9	
200	0.8	0.3	0.9	1.5	3.5									7.0	
205															
SUM	304.4	282.9	742.1	2943.9	2934.1	1733.3	795.5	273.7	83.2	19.5	2.7	0.1		10115.5	

MINUTES FOR TORQUE2 VS RPM BY MISSION SEG SUM, BY RATE OF CLIMB SUM, BY OAT SUM														SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS	3.3	1.7	2.9	5.5	2.9	8.5		0.2						25.0	
180	30.8	84.1	215.4	672.1	743.7	298.4	120.5	28.3	8.2	0.2				2201.5	
185	71.0	109.0	636.2	2343.2	2581.9	1118.8	496.6	133.2	33.4	2.3				7525.4	
190	4.0	4.6	29.3	110.2	124.4	51.6	20.3	2.9	0.3					347.6	
195			0.8	1.3	4.1	2.7								8.9	
200			0.3	2.4	3.5	0.8								7.0	
205															
SUM	109.2	199.3	884.7	3134.7	3460.4	1480.7	637.6	164.5	41.9	2.5				10115.5	

TABLE XLV. TIME FOR ENGINE TORQUE 1 VERSUS ENGINE TORQUE 2, SAMPLE II

MINUTES FOR TORQUE1 VS TORQUE2														SUM	
LESS	10	20	30	40	50	60	70	80	90	100	110	120	SUM		
LESS	10.3	12.9	35.8	35.1	7.7	4.4	3.0							109.2	
10	25.5	11.8	41.2	40.9	40.0	14.1	4.0	1.7						199.3	
20	107.8	80.2	235.3	322.3	113.6	20.4	4.3	0.5	0.3					884.7	
30	119.2	129.4	358.7	1550.4	753.2	206.5	16.6	0.5	0.0					3134.6	
40	38.4	39.1	61.5	910.7	1533.8	693.1	168.2	14.1	1.4					3460.4	
50	3.3	7.5	8.5	52.6	430.7	635.5	256.6	62.3	12.8	1.0				1480.7	
60		2.0	0.9	1.9	53.3	147.5	284.0	110.8	31.4	5.6	0.2			637.6	
70					1.7	11.2	52.8	65.2	27.7	5.7	0.1			164.5	
80						0.6	5.9	18.0	9.1	6.8	1.5			41.9	
90							0.2	0.7	0.4	0.2	0.9	0.1		2.5	
100															
110															
120															
SUM	304.4	282.9	742.1	2943.9	2934.1	1733.3	795.5	273.7	83.2	19.5	2.7	0.1		10115.4	



TABLE XLVI. CYCLIC STEADY VERSUS CYCLIC PEAKS BY  
COLLECTIVE STEADY (MISSION SEGMENT 4),  
SAMPLE II

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											40
	LESS	1C	2C	3C	4C	5C	6C	7C	8C	9C	SUM
LESS											
-4C											
-3C											
-2C							1	2			3
-1C											
1C						1	1				2
2C											
3C											
4C											
SUM						1	2	2			5
TIME	0.	0.	0.	10.2	434.8	696.3	220.0	117.8	18.8	3.8	1501.6

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											50
	LESS	1C	2C	3C	4C	5C	6C	7C	8C	9C	SUM
LESS											
-4C											
-3C											
-2C							1	1			2
-1C											
1C							1				1
2C											
3C											
4C											
SUM							2	1			3
TIME	0.	0.	0.	27.8	934.2	1207.1	133.6	128.5	6.5	0.1	2437.9

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											60
	LESS	1C	2C	3C	4C	5C	6C	7C	8C	9C	SUM
LESS											
-4C											
-3C											
-2C											
-1C											
1C						1					1
2C											
3C											
4C											
SUM						1					1
TIME	0.	0.	0.3	71.7	423.9	399.4	60.1	14.2	0.1	0.	959.7

TABLE XLVI - Concluded

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											70
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20											
-10											
10						3	1				4
20											
30											
40											
SUM						3	1				4
TIME	0.	0.	0.	33.3	8.3	5.0	4.1	2.7	0.1	0.	53.4

TABLE XLVII. CYCLIC STEADY VERSUS CYCLIC PEAKS BY ALTITUDE (MISSION SEGMENT 4), SAMPLE II

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE LESS											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30											
-20											
-10											
10						1					1
20											
30											
40											
SUM						1					1
TIME	0.	0.	0.	0.	0.	6.5	18.0	1.7	0.3	0.	26.5

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE 1000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20							2	1			3
-10											
10						3	1				4
20											
30											
40											
SUM						3	3	1			7
TIME	0.	0.	0.	0.	7.4	33.7	91.5	60.7	3.7	0.	198.9

TABLE XLVII - Concluded

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE 2000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20								2			2
-10											
10						1	2				3
20											
30											
40											
SUM						1	2	2			5
TIME	0.	0.	0.3	100.6	1333.5	1741.7	301.8	170.6	21.7	3.9	3674.2

TABLE XLVIII. CYCLIC STEADY VERSUS CYCLIC PEAKS BY AIRSPEED (MISSION SEGMENT 4), SAMPLE II

CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20							2	3			5
-10											
10						5	3				8
20											
30											
40											
SUM						5	5	3			13
TIME	0.	0.	0.	0.	1.5	56.6	325.3	189.0	25.1	3.9	601.4

TABLE XLIX. CYCLIC STEADY VERSUS CYCLIC PEAKS BY ROTOR RPM (MISSION SEGMENT 4), SAMPLE II

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 180											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20							1				1
-10											
10						3					3
20											
30											
40											
SUM						3	1				4
TIME	0.	0.	0.3	47.9	456.5	397.7	116.2	42.5	1.1	0.	1054.2

TABLE XLIX - Concluded

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 185											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20							1	2			3
-10											
10						2	3				5
20											
30											
40											
SUP						2	4	2			8
TIME	0.	0.	0.	92.2	1266.9	1855.0	292.2	215.8	24.7	3.9	3750.6

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 190											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20								1			1
-10											
10											
20											
30											
40											
SUP								1			1
TIME	0.	0.	0.	2.8	81.5	76.1	9.1	6.6	0.	0.	176.1

CYCLIC STEADY VS CYCLIC PEAKS BY RPM SUM											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20							2	3			5
-10											
10						5	3				8
20											
30											
40											
SUP						5	5	3			13
TIME	0.	0.	0.3	143.0	1809.5	2324.0	423.1	265.3	25.7	3.9	4994.8

TABLE L. AIRSPEED ACCELERATION VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE II

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS												
-40						18						18
-30						315	11	1				327
-20						298	7	1				306
-10												
10						7						7
20						6						6
30												
40												
SUM						644	18	2				664

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS												
-40												
-30						1						1
-20						1						1
-10												
10												
20												
30												
40												
SUM						2						2

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS												
-40						4						4
-30						240	1					241
-20						255	2					257
-10												
10						19						19
20						12						12
30						1						1
40												
SUM						571	3					574

TABLE LI. ROTOR RPM VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE II

RPM VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT								
	LESS	180	185	190	195	200	205	SUM
LESS								
-4C		5	11	2				18
-3C	1	77	229	20				327
-2C	1	60	225	20				306
-1C								
1C		1	6					7
2C			6					6
3C								
40								
SUM	2	143	477	42				664
TIME	8.4	699.2	2445.4	161.9	2.9	2.5	0.	3320.2
RPM VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR								
	LESS	180	185	190	195	200	205	SUM
LESS								
-4C								
-3C			1					1
-2C		1						1
-1C								
1C								
2C								
3C								
40								
SUM		1	1					2
TIME	0.	1.6	20.5	0.	0.	0.	0.	22.1
RPM VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT								
	LESS	180	195	190	195	200	205	SUM
LESS								
-4C		1	3					4
-3C		51	177	13				241
-2C		51	235	11				297
-1C								
1C		2	16	1				19
20			12					12
3C			1					1
40								
SUM		105	444	25				574
TIME	10.5	899.4	2995.7	176.9	3.1	3.1	0.	4088.7

TABLE LI - Concluded

RPM VS CYCLIC PEAKS BY MISSION SEGMENT STEADY								
	LESS	180	185	190	195	200	205	SUM
LESS								
-40								
-30								
-20		1	3	1				5
-10								
10		3	5					8
20								
30								
40								
SUM		4	8	1				13
TIME	8.7	1054.2	3750.6	176.1	3.4	1.6	0.	4994.7

TABLE LII. AIRSPEED VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE II

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40	3	4		1	1	4	1	3		1						18
-30	47	29	20	45	55	30	31	16	30	7	7	1				327
-20	103	30	22	28	28	27	21	25	12	7	3					306
-10																
10	7															7
20	6															6
30																
40																
SUM	166	63	51	74	84	61	52	44	42	15	10	1				664
TIME	495.7	651.2	380.9	393.4	314.4	316.1	252.8	229.4	173.6	91.4	20.9	2.4	0.	0.	0.	3320.3

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40					1											1
-30							1									1
-20																
-10																
10																
20																
30																
40																
SUM					1		1									2
TIME	0.	0.8	0.3	0.6	0.5	1.2	4.2	8.4	5.0	0.8	0.	0.	0.	0.	0.	22.1

TABLE LII - Concluded

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-4C	1		1		1					1						4
-3C	6	6	6	21	42	36	25	19	35	30	11	2				241
-2C	40	29	13	17	25	19	32	40	49	24	8	1				297
-1C																
1C	18					1										19
2C	12															12
3C	1															1
4C																
SUM	78	35	22	38	68	56	57	59	84	55	19	3				574
TIME	571.7	533.6	293.2	317.0	370.4	347.5	386.2	425.3	402.8	285.1	176.9	25.9	1.1	0.2	0.	4088.8

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-4C																
-3C																
-2C	5															5
-1C																
1C	8															8
2C																
3C																
4C																
SUM	13															13
TIME	601.4	223.6	284.3	471.6	458.1	445.1	559.7	663.4	736.0	420.7	125.2	9.2	2.4	0.	0.	4994.8

TABLE LIII. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY CYCLIC STEADY (MISSION SEGMENT 4), SAMPLE II

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 40											
	LESS	1C	2C	3C	40	50	60	70	80	90	SUM
LESS											
-4C											
-3C							1				1
-2C					2	1	1				4
-1C											
1C					1		1				2
2C											
3C											
40											
SUM					3	1	3				7
TIME	0.	0.	0.	8.2	434.8	934.3	423.9	8.3	0.	0.	1809.5

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 50											
	LESS	1C	2C	3C	40	50	60	70	80	90	SUM
LESS											
-4C											
-3C								2			2
-2C					1	4	4	2			11
-1C											
1C											
2C											
3C											
40											
SUM					1	4	4	4			13
TIME	0.	0.	0.	26.3	696.2	1207.1	389.4	5.0	0.	0.	2324.0



TABLE LIII - Concluded

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											60
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-4C							2				2
-3C					1		12	2			15
-2C					1	28	29				58
-1C											
1C					5	4	2				12
2C					2	2					4
3C											
4C											
SUM					10	34	45	2			91
TIME	0.	0.	0.	5.4	220.0	133.6	60.1	4.1	0.	0.	423.1

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 70											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-4C											
-3C						1	6	3			10
-2C					2	14	14	1			31
-1C											
1C					3	1					4
2C					1	3					4
3C											
4C											
SUM					6	19	20	4			49
TIME	0.	0.	0.	2.0	117.8	128.5	14.2	2.7	0.	0.	265.3

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											80
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
-4C											
-3C							1				1
-2C						1					1
-1C											
1C											
2C						1					1
3C											
4C											
SUM						2	1				3
TIME	0.	0.	0.	0.2	18.8	6.5	0.1	0.1	0.	0.	25.7

COLL.STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											90
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						1					1
-10											
10											
20											
30											
40											
SUM						1					1
TIME	0.	0.	0.	0.	3.8	0.1	0.	0.	0.	0.	3.9

TABLE LIV. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY ALTITUDE (MISSION SEGMENT 4), SAMPLE II

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE LESS											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						1					1
-10											
10					1						1
20											
30											
40											
SUM					1	1					2
TIME	0.	0.	0.	2.0	22.7	1.7	0.1	0.	0.	0.	26.5

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 1000											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40							1				1
-30							5	4			9
-20						17	18	2			37
-10											
10					6	3	1				10
20					1	2					3
30											
40											
SUM					7	22	25	6			60
TIME	0.	0.	0.	13.8	100.4	66.5	14.6	3.7	0.	0.	198.9

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 2000											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40							1				1
-30					1	1	15	3			20
-20					4	21	30	1			60
-10											
10					3	2	2				7
20					2	4					6
30											
40											
SUM					12	28	48	4			102
TIME	0.	0.	0.	25.2	1087.6	1753.6	768.2	59.4	0.	0.	3674.2

TABLE LV. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY  
AIRSPEED (MISSION SEGMENT 4), SAMPLE II

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY LESS											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40							2				2
-30					1	1	20	7			29
-20					2	43	48	3			96
-10											
10					9	5	3				17
20					3	6					9
30											
40											
SUM					15	55	73	10			153
TIME	0.	0.	0.	7.3	320.6	206.8	58.5	8.3	0.	0.	601.4
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 40											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20					1						1
-10											
10											
20											
30											
40											
SUM					1						1
TIME	0.	0.	0.	1.4	10.0	122.5	89.7	0.	0.	0.	223.6
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 60											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						1					1
-10											
10											
20											
30											
40											
SUM						1					1
TIME	0.	0.	0.	2.0	5.4	188.7	86.5	1.8	0.	0.	284.3
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 70											
LESS	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20					1						1
-10											
10											
20											
30											
40											
SUM					1						1
TIME	0.	0.	0.	8.6	54.6	263.4	131.5	0.	0.	0.	458.2

TABLE LV - Continued

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 75											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20					1	1					2
-10											
10					1						1
20											
30											
40											
SUM					2	1					3
TIME	0.	0.	0.	9.8	164.9	176.7	86.9	6.8	0.	0.	445.1
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 80											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20					1						1
-10											
10											
20											
30											
40											
SUM					1						1
TIME	0.	0.	0.	7.6	309.3	168.3	55.9	18.6	0.	0.	559.7
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 85											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						2					2
-10											
10											
20											
30											
40											
SUM						2					2
TIME	0.	0.	0.	2.1	324.7	292.0	39.6	5.0	0.	0.	663.4
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 90											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-40											
-30											
-20						1					1
-10											
10											
20											
30											
40											
SUM						1					1
TIME	0.	0.	0.	0.7	212.0	423.4	91.5	1.5	0.	0.	730.0

TABLE LV - Concluded

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 95											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-4C											
-3C											
-2C						1					1
-1C											
1C											
2C											
3C											
40											
SUM						1					1
TIME	0.	0.	0.	0.	55.9	242.4	114.1	8.3	0.	0.	420.7

TABLE LVI. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY ROTOR RPM (MISSION SEGMENT 4), SAMPLE II

COLL. STEADY VS COLLECTIVE PEAKS BY RPM 180											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-4C							1				1
-3C					1		2	2			5
-2C						9	2				11
-1C											
10					7	2					9
20						1					1
30											
40											
SUM					8	12	5	2			27
TIME	0.	0.	0.	14.4	312.3	507.4	215.0	5.1	0.	0.	1054.2

COLL. STEADY VS COLLECTIVE PEAKS BY RPM 185											
	LESS	10	20	30	40	50	60	70	80	90	SUM
LESS											
-4C							1				1
-3C						1	17	4			22
-2C					5	36	44	3			88
-1C											
1C					3	3	3				9
20					2	5					8
30											
40											
SUM					11	45	65	7			128
TIME	0.	0.	0.	27.5	1126.2	1841.4	709.0	46.5	0.	0.	3750.6

TABLE LVI - Concluded

	COLL. STEADY VS COLLECTIVE PEAKS BY RPM										SUM
	LESS	10	20	30	40	50	60	70	80	90	
LESS											
-40											
-30							1	1			2
-20					1	4	2				7
-10											
10											
20											
30											
40											
SUM					1	4	3	1			9
TIME	0.	0.	0.	0.3	60.1	97.3	26.7	1.7	0.	0.	176.1

	COLL. STEADY VS COLLECTIVE PEAKS BY RPM										SUM
	LESS	10	20	30	40	50	60	70	80	90	
LESS											
-40							2				2
-30					1	1	20	7			29
-20					6	49	48	3			106
-10											
10					10	5	3				18
20					3	6					9
30											
40											
SUM					20	61	73	10			164
TIME	0.	0.	0.	42.1	1501.6	2437.9	959.7	53.4	0.	0.	4994.8

TABLE LVII. AIRSPEED ACCELERATION VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE II

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. ASCENT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS												
-40												
-30						2	1					3
-20						25						25
-10												
10					2	431	9					442
20						151	1					152
30						6						6
40												
SUM					2	615	11					628

TABLE LVII - Concluded

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. MANUVR												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS												
-40												
-30						1						1
-20						2						2
-10												
10												
20												
30												
40												
SUM						3						3

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. DESCNT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS					4	15						19
-40					21	110	1					132
-30					24	267						291
-20					5	304						312
-10												
10						263						263
20						56	1					97
30						10						10
40												
SUM					57	1065	2					1124

TABLE LVIII. ROTOR RPM VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE II

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT								
LESS	LESS	180	185	190	195	200	205	SUM
-40								
-30			3					3
-20		5	19	1				25
-10								
10		116	310	16				442
20		43	106	2		1		152
30		3	3					6
40								
SUM		167	441	19		1		628
TIME	8.4	699.2	2445.4	161.9	2.9	2.5	0.	3320.2

TABLE LVIII - Concluded

RPM VS CCLLECTIVE PEAKS BY MISSION SEGMENT MANUVR

	LESS	180	185	190	195	200	205	SUM
LESS								
-4C								
-3C			1					1
-2C			2					2
-1C								
1C								
2C								
3C								
4C								
SUM			3					3
TIME	0.	1.6	20.5	0.	0.	0.	0.	22.1

RPM VS CCLLECTIVE PEAKS BY MISSION SEGMENT DESCNT

	LESS	180	185	190	195	200	205	SUM
LESS	1		15	3				19
-4C		23	105	4				132
-3C	1	77	200	12	1			291
-2C	1	64	231	15		1		312
-1C								
1C		61	190	10	2			263
2C		26	67	4				97
3C		1	9					10
4C								
SUM	3	252	617	48	3	1		1124
TIME	10.5	899.4	2995.7	176.9	3.1	3.1	0.	4088.7

RPM VS CCLLECTIVE PEAKS BY MISSION SEGMENT STEADY

	LESS	180	185	190	195	200	205	SUM
LESS								
-4C		1	1					2
-3C		5	22	2				29
-2C		11	88	7				106
-1C								
1C		9	9					18
2C		1	8					9
3C								
4C								
SUM		27	123	9				164
TIME	8.7	1054.2	3750.6	176.1	3.4	1.6	0.	4994.7



TABLE LIX. AIRSPEED VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE II

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40				1												3
-30	2			2												25
-20	8	2	2	2	1	2	1		1	1						
-10																
10	133	79	39	32	40	14	25	23	21	6	3	1				442
20	75	32	14	10	1	5	1	3	1	3	1					192
30	4	1								1						6
40																
SUM	222	115	55	45	50	43	32	26	23	11	4	1				628
TIME	433.7	651.2	380.9	393.4	314.4	316.1	252.8	229.4	173.6	91.4	20.9	2.4	0.	0.	0.	3320.3

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40																
-30						1										1
-20			1						1							2
-10																
10																
20																
30																
40																
SUM			1			1			1							3
TIME	0.	0.8	0.3	0.6	0.9	1.2	4.2	8.4	5.0	0.8	0.	0.	0.	0.	0.	22.1

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40	2	4	4	3	1	2	1		1	1						19
-30	15	39	16	15	20	15	12	5	3							132
-20	15	122	35	23	31	19	15	11	15	5						291
-10	44	101	29	24	20	22	24	23	10	10	2					312
10	144	17	9	17	20	8	1	6	10	10	9	2				263
20	93	1				2						1				97
30	10															10
40																
SUM	318	284	92	82	96	68	46	52	41	29	11	3				1124
TIME	57.7	533.6	293.2	317.0	370.5	347.5	386.2	425.3	402.8	285.1	128.9	25.9	1.1	0.2	0.	4088.8

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
LESS																
-40	2															2
-30	29															29
-20	96	1	1		1	2	1	2	1	1						106
-10																
10	17					1										18
20	9															9
30																
40																
SUM	153	1	1		1	3	1	2	1	1						164
TIME	631.4	223.6	284.3	471.6	458.1	445.1	559.1	663.4	730.0	420.7	125.2	9.2	2.4	0.	0.	4994.8

TABLE LX. GUST  $n_z$  PEAKS FOR  $\mu$  VERSUS  $n_z$  BY MISSION SEGMENT, ALTITUDE, AND  $C_T/\sigma$ , SAMPLE II

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 1000, CT/S LESS									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1				1
0.8									
SUM					1				1
TIME	4.1	1.0	2.1	3.0	4.0	0.7	0.	0.	14.9

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 1000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1				1
0.8									
SUM					1				1
TIME	89.0	19.0	37.6	56.4	44.5	7.6	0.	0.	250.0

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 2000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					5	5			10
0.8									
0.7					3	11			14
0.6									
SUM					8	16			24
TIME	71.9	23.6	60.3	249.0	593.7	434.7	2.8	0.	1435.9

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 2000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					5	5			10
0.8									
0.7					3	11			14
0.6									
SUM					8	16			24
TIME	184.2	44.4	121.6	699.7	1164.6	448.5	2.8	0.	2665.8

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 5000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						2			2
0.8									
SUM						2			2
TIME	2.4	0.8	1.3	23.0	115.0	135.7	0.1	0.	278.4

GUST $n_z$ PEAKS FOR $\mu$ VS $n_z$ BY MISSION SEGMENT ASCENT, ALTITUDE 5000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						2			2
0.8									
SUM						2			2
TIME	2.4	0.8	1.3	65.2	170.2	137.5	0.1	0.	377.6

TABLE LX - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					6	7			13
0.8									
0.7					3	11			14
0.6									
SUM					9	18			27
TIME	284.9	65.3	165.6	824.8	1381.8	594.8	2.9	0.	3320.3

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 2000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1				1
0.8									
0.7						1			1
0.6									
SUM					1	1			2
TIME	0.	0.	0.	0.8	5.4	15.9	0.	0.	22.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 2000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1				1
0.8									
0.7						1			1
0.6									
SUM					1	1			2
TIME	0.	0.	0.	0.8	5.4	15.9	0.	0.	22.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1				1
0.8									
0.7						1			1
0.6									
SUM					1	1			2
TIME	0.	0.	0.	0.8	5.4	15.9	0.	0.	22.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 1000, CT/S LESS									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1				1
0.8									
SUM					1				1
TIME	6.6	4.5	7.7	8.0	11.8	4.6	0.	0.	43.2

TABLE LX - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 1000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1	3			4
0.8									
0.7					1				1
0.6									
SUM					2	3			5
TIME	53.0	27.0	40.6	57.2	60.1	22.0	1.1	0.	260.9

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 1000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					2	3			5
0.8									
0.7					1				1
0.6									
SUM					3	3			6
TIME	76.4	43.1	78.7	93.4	80.4	27.5	1.1	0.	400.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000, CT/S LESS									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1				1
0.8									
0.7						1			1
0.6									
SUM					1	1			2
TIME	7.3	5.0	7.3	15.7	19.7	22.6	0.9	0.	78.4

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3					1	1			2
1.2					6	16	2		24
0.8									
0.7					5	15			20
0.6						1			1
0.5									
SUM					12	33	2		47
TIME	92.7	51.8	79.2	171.1	541.3	993.2	28.1	0.	1957.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000, CT/S 0.09									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1				1
0.8									
SUM					1				1
TIME	38.9	22.4	74.4	335.6	665.7	52.9	0.	0.	1189.9

TABLE LX - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3					1	1			2
1.2					8	16	2		26
0.8									
0.7					5	16			21
0.6						1			1
0.5									
SUM					14	34	2		50
TIME	138.9	79.2	160.9	522.3	1228.6	1068.7	29.0	0.	3227.7

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 5000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1	1			2
0.8									
0.7					1				1
0.6									
SUM					2	1			3
TIME	3.6	0.2	0.5	1.7	70.8	264.2	5.4	0.	346.4

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 5000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1	1			2
0.8									
0.7					1				1
0.6									
SUM					2	1			3
TIME	3.6	0.2	1.8	18.1	130.2	274.7	5.4	0.	434.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3					1	1			2
1.2					11	20	2		33
0.8									
0.7					7	16			23
0.6						1			1
0.5									
SUM					19	38	2		59
TIME	228.2	125.4	246.2	639.0	1442.1	1372.3	35.6	0.	4088.8

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 2000, CT/S LESS									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						1			1
0.8									
SUM						1			1
TIME	11.7	0.6	0.	0.	0.	9.9	0.	0.	22.2

TABLE LX - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 2000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					2	16			18
0.8									
0.7					1	7			8
0.6						2			2
0.5									
SUM					3	25			28
TIME	273.2	21.8	2.8	34.8	427.0	1327.6	11.6	0.	2098.8

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 2000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					2	17			19
0.8									
0.7					1	7			8
0.6						2			2
0.5									
SUM					3	26			29
TIME	338.0	26.0	23.6	313.4	1545.6	1390.0	11.6	0.	3666.2

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 5000, CT/S 0.06									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						1			1
0.8									
0.7						1			1
0.6									
SUM						2			2
TIME	1.2	0.5	1.1	4.3	223.6	686.6	2.6	0.	919.9

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 5000									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						1			1
0.8									
0.7						1			1
0.6									
SUM						2			2
TIME	1.2	0.5	1.6	39.2	321.7	728.2	2.6	0.	1095.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					2	18			20
0.8									
0.7					1	8			9
0.6						2			2
0.5									
SUM					3	28			31
TIME	509.6	45.1	34.2	353.4	1897.4	2124.1	15.0	0.	4980.8

TABLE LX - Concluded

GUST NZ PEAKS FOR MU VS NZ									
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3					1	1			2
1.2					20	45	2		67
0.8									
0.7					11	36			47
0.6						3			3
0.5									
SUM					32	85	2		119
TIME	1035.1	237.3	446.1	1817.9	4728.8	4107.2	53.5	0.	12426.0

TABLE LXI. GUST  $n_z$  PEAKS FOR AIRSPEED VERSUS  $n_z$  BY WEIGHT, ALTITUDE, AND MISSION SEGMENT, SAMPLE II

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2							1									1
0.8																
SUM							1									1
TIME	11.5	4.9	1.7	1.6	1.6	0.8	1.4	0.4	0.4	0.	0.	0.	0.	0.	0.	23.9

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2							1									1
0.8																
SUM							1									1
TIME	14.3	9.0	2.1	1.6	1.6	0.8	1.6	0.4	0.4	0.	0.	0.	0.	0.	0.	27.8

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									2							2
0.8																
0.7					1	1				1						3
0.6																
SUM					1	1			2	1						5
TIME	17.1	14.2	3.5	4.8	7.3	10.5	15.6	14.5	13.0	12.7	11.9	1.6	0.	0.	0.	127.4

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									1							1
0.8																
SUM									1							1
TIME	11.5	0.	0.1	1.3	4.5	1.1	1.7	11.4	11.2	9.9	1.8	0.	0.	0.	0.	54.5

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									3							3
0.8																
0.7					1	1				1						3
0.6																
SUM					1	1			3	1						6
TIME	39.3	19.1	4.6	7.7	12.6	14.8	21.5	30.8	28.0	22.8	13.8	1.6	0.	0.	0.	212.7

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2							1		3							4
0.8																
0.7					1	1				1						3
0.6																
SUM					1	1	1		3	1						7
TIME	50.9	26.1	7.3	9.6	14.3	17.3	25.6	34.4	32.0	26.6	14.8	1.8	0.	0.	0.	260.7

GUST $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 23000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	20.4	7.0	1.6	2.0	3.4	1.7	0.8	0.3	0.9	0.3	0.	0.	0.	0.	0.	38.4



TABLE LXI - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000, MISSION SEGMENT DESCNT															
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3															
1.2						1			1						2
0.8					1										1
0.7															
0.6									1						3
SUM					1	1									
TIME	48.2	27.2	7.8	6.4	6.0	7.9	6.4	5.6	3.3	2.2	0.4	0.	0.	0.	121.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000															
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3															
1.2				1		1			1						3
0.8															
0.7					1										1
0.6															
SUM				1	1	1			1						4
TIME	101.7	34.2	9.3	8.5	10.4	10.8	11.3	6.1	6.2	4.1	0.4	0.	0.	0.	203.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3															
1.2						1	1	1	1						4
0.8															
0.7									1						2
0.6															
SUM						1	1	1	2						6
TIME	42.5	69.2	25.3	39.0	31.2	49.0	54.4	58.2	41.6	16.4	3.7	0.2	0.	0.	426.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT DESCNT															
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4															
1.3								1							1
1.2				2	1		2	1	2	2					11
0.8															
0.7						3	2	1		1					7
0.6															
SUM				2	1	3	4	4	2	3					19
TIME	83.8	97.9	31.2	39.4	92.4	60.0	93.3	121.1	132.1	88.1	36.7	10.9	0.3	0.	802.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT STEADY															
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3															
1.2								1	6	4					11
0.8															
0.7						1	2								3
0.6									1						1
0.5															
SUM						1	3	5	5						15
TIME	82.2	2.2	7.7	10.7	13.2	32.9	83.3	125.5	117.2	90.4	18.8	0.4	0.	0.	565.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000															
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4															
1.3															
1.2				2	1	1	4	1	7	2					1
0.8															26
0.7						4	4	2	1	1					12
0.6									1						1
0.5															
SUM				2	1	5	8	12	9	3					40
TIME	211.5	129.3	64.1	81.0	96.7	141.9	231.0	304.8	290.5	195.3	59.2	11.1	0.3	0.	1917.1

TABLE LXI - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSION SEGMENT ASCENT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2							2									2
0.8																
SUM							2									2
TIME	0.2	3.5	3.2	5.3	8.5	14.2	17.5	18.1	9.1	7.6	1.2	1.6	0.	0.	0.	49.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSION SEGMENT DESCNT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2							1									1
0.8																
0.7						1										1
0.6																
SUM						1	1									2
TIME	0.	1.1	0.8	1.0	2.3	7.4	22.4	30.6	32.3	23.5	9.2	1.4	0.	0.	0.	132.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSION SEGMENT STEADY																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2							1									1
0.8																
0.7																
0.6																
SUM							1									2
TIME	0.	0.	0.	0.9	2.8	32.0	55.7	72.8	89.6	32.1	10.0	2.3	2.4	0.	0.	300.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2							2	2								4
0.8																
0.7						1										2
0.6																
SUM						1	2	2								6
TIME	0.2	4.6	4.0	7.2	13.3	53.6	95.7	121.5	131.4	63.1	20.4	5.3	2.4	0.	0.	422.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.4																
1.3																
1.2					3	1	4	6	4	8	2					33
0.8																
0.7						2	4	4	1	1	1					15
0.6										1						1
0.5																
SUM					3	3	8	10	15	10	3					50
TIME	327.2	172.2	78.3	97.1	120.5	206.7	338.3	432.4	428.1	262.6	80.0	16.4	2.7	0.	0.	2562.5

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2					1			1								2
0.8																
SUM					1			1								2
TIME	50.8	24.4	7.1	6.0	4.9	6.1	3.8	2.6	2.0	1.5	0.	0.	0.	0.	0.	109.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2					1			1								2
0.8																
SUM					1			1								2
TIME	152.6	35.5	12.0	11.3	9.8	9.0	5.6	5.5	2.3	1.9	0.	0.	0.	0.	0.	245.6

TABLE LXI - Continued

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT ASCENT															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3					1	1	2		1							5
1.2																
0.8			2					2								7
0.7																
0.6					1	1	2	2	4							12
SUM			2		1	1	2	2	4							12
TIME	64.6	87.1	45.7	59.3	60.3	90.5	76.3	66.6	50.4	29.9	7.0	0.3	0.	0.	0.	537.8

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT MANOVRA															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
0.8																
0.7									1							1
0.6																
SUM									1							1
TIME	0.	0.	0.	0.	0.	0.3	3.2	6.0	2.7	0.0	0.	0.	0.	0.	0.	12.3

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT DESCENT															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.4						1										1
1.3						2				2	1	2				10
1.2					1			2								
0.8																
0.7									4	1	2					7
0.6											1					1
0.5																
SUM					1	3		2	4	3	4	2				19
TIME	87.0	58.0	23.7	29.5	42.6	86.3	117.2	124.3	101.1	78.2	41.4	7.5	0.3	0.	0.	797.2

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT STEADY															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2							2		3	2						7
0.8																
0.7							1			1						5
0.6										1						1
0.5																
SUM							3		4	4						13
TIME	130.2	8.1	7.7	11.7	43.2	90.4	143.9	200.6	206.4	91.0	32.5	5.4	0.	0.	0.	971.5

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.4						1										1
1.3					2	3	4	2	4	4	1	2				22
1.2																
0.8																
0.7			2				1	2	11	2	2					20
0.6										1	1					2
0.5																
SUM			2		2	4	5	4	15	7	4	2				45
TIME	283.2	153.2	77.1	100.5	146.1	267.5	340.7	397.5	461.0	199.1	80.4	13.2	0.3	0.	0.	2420.3

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSION SEGMENT DESCENT															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2										1						1
0.8																
SUM										1						1
TIME	4.3	0.4	1.4	3.0	8.5	11.1	24.3	37.0	40.7	27.9	10.4	1.9	0.	0.	0.	171.3

TABLE LXI - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2										1						1
0.8																
SUM										1						1
TIME	11.0	10.5	5.5	17.7	33.3	67.6	150.4	141.1	170.5	122.4	25.5	2.0	0.	0.	0.	757.9

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3						1										1
1.2					3	3	4	3	4	5	1	2				25
0.8																
0.7			2				1	2	1	2	2					20
0.6										1	1					2
0.5																
SUM			2		3	4	5	5	15	8	4	2				48
TIME	470.7	200.6	94.6	129.5	189.5	345.7	497.7	544.3	534.1	323.4	106.4	15.3	0.3	0.	0.	3452.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									1							1
0.8																
0.7							1	3	1							5
0.6																
SUM							1	3	2							6
TIME	31.2	32.8	24.3	29.5	31.0	33.2	37.5	30.3	26.1	15.4	4.9	0.1	0.	0.	0.	296.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						1										1
0.8																
SUM						1										1
TIME	0.	0.8	0.3	0.6	0.9	0.9	1.0	2.4	2.2	0.8	0.	0.	0.	0.	0.	9.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2								1								1
0.8																
0.7							1	1	1	1						4
0.6																
SUM							1	2	1	1						5
TIME	19.0	12.0	4.1	6.5	9.4	13.6	25.9	36.1	41.7	36.9	12.2	1.6	0.2	0.	0.	219.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						1		1	1							3
0.8																
0.7							2	4	2	1						9
0.6																
SUM						1	2	5	3	1						12
TIME	78.2	45.6	30.2	49.1	46.0	68.5	120.2	150.7	174.9	119.5	41.6	2.0	0.2	0.	0.	926.7

TABLE LXI - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						1		1	1							3
0.8							2	4	2	1						9
0.7																
0.6						1	2	5	3	1						12
SUM																
TIME	126.8	63.2	39.3	62.0	53.8	80.6	140.2	196.5	236.5	159.8	62.6	3.4	0.5	0.2	0.	1225.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 33000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	9.3	22.4	3.5	6.4	14.6	6.7	2.7	1.0	0.1	0.	0.	0.	0.	0.	0.	66.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 33000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	32.8	39.6	7.4	23.4	37.6	21.0	7.3	1.3	0.1	0.	0.	0.	0.	0.	0.	170.6

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 33000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	51.5	39.9	7.6	23.4	37.6	21.0	7.3	1.3	0.1	0.	0.	0.	0.	0.	0.	169.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	18.1	41.7	30.6	40.3	31.0	10.5	6.6	3.6	0.7	0.	0.	0.	0.	0.	0.	183.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	99.1	220.0	167.8	183.9	104.0	62.8	33.5	8.6	0.7	0.	0.	0.	0.	0.	0.	980.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	241.4	176.8	198.3	109.3	68.8	37.0	10.0	1.0	0.	0.	0.	0.	0.	0.	0.	987.7

TABLE LXI - Concluded

GUST NZ PEAKS FOR VELOCITY VS NZ																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3						1			1							2
1.2				1	7	5	9	10	17	13	3	2				67
0.8																
0.7			2		1	3	7	10	16	5	3					47
0.6										2	1					3
0.5																
SUM			2	1	8	9	16	20	34	20	7	2				119
TIME	1666.8	1409.2	958.7	1182.6	1143.9	1109.9	1203.0	1326.4	1311.3	798.1	274.9	37.5	3.5	0.2	0.	12426.0

TABLE LXII. MANEUVER  $n_z$  PEAKS FOR  $\mu$  VERSUS  $n_z$  BY MISSION SEGMENT, ALTITUDE, AND  $C_T/\sigma$ , SAMPLE II

MANEUVER	$n_z$ PEAKS FOR	$\mu$	VS	$n_z$	BY MISSION SEGMENT	ASCENT,	ALTITUDE	LESS, $C_T/\sigma$	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	1								1
0.8									
SUM	1								1
TIME	6.6	1.1	3.0	1.7	1.9	0.1	0.	0.	14.3

MANEUVER	NZ PEAKS FOR				MU	VS	NZ	BY MISSION SEGMENT ASCENT, ALTITUDE				LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM			
1.3												
1.2	1										1	
0.8												
SUM	1										1	
TIME	13.3	1.2	5.2	3.5	2.5	1.2	0.	0.	26.9			

MANEUVER	$n_z$ PEAKS FOR	$\mu$	VS	$n_z$	BY MISSION SEGMENT	ASCENT,	ALTITUDE	1000, $C_T/\sigma$	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	2	1			1				4
0.8									
SUM	2	1			1				4
TIME	4.1	1.0	2.1	3.0	4.0	0.7	0.	0.	14.9

MANEUVER	$n_z$ PEAKS FOR	$\mu$	VS	$n_z$	BY MISSION SEGMENT	ASCENT,	ALTITUDE	1000, $C_T/\sigma$	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	9	2	2	1	1	1			15
0.8									
SUM	9	2	2	1	1	1			15
TIME	36.7	11.8	18.4	25.8	23.3	6.6	0.	0.	122.6

MANEUVER	NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT ASCENT, ALTITUDE					1000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2	11	3	2	1	2	1			20	
0.8										
SUM	11	3	2	1	2	1			20	
TIME	85.0	19.0	37.6	56.4	44.5	7.6	0.	0.	250.0	

MANEUVER	$n_z$ PEAKS FOR	$\mu$	VS	$n_z$	BY MISSION SEGMENT	ASCENT,	ALTITUDE	2000, $C_T/\sigma$	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	2		1						3
0.8									
SUM	2		1						3
TIME	4.6	1.1	3.5	5.9	9.2	2.4	0.1	0.	26.7

TABLE LXII - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	ASCENT,	ALTITUDE	2000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3				1	2	1	1		5
1.2	17	2	2	7	14	15			57
0.8									
0.7			1	1	10	15			27
0.6									
SUM	17	2	3	9	26	31	1		84
TIME	71.9	23.6	60.3	249.0	593.7	434.7	2.4	0.	1435.4

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	ASCENT,	ALTITUDE	2000, CT/S	0.09
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2				1	1				2
0.8									
0.7				1	1				2
0.6									
SUM				2	2				4
TIME	107.7	19.6	57.9	444.8	561.6	11.5	0.	0.	1203.2

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	2000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3				1	2	1	1		5
1.2	19	2	3	8	15	15			62
0.8									
0.7			1	2	11	15			29
0.6									
SUM	19	2	4	11	28	31	1		95
TIME	184.2	44.4	121.6	699.7	1164.6	448.5	2.8	0.	2665.5

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	ASCENT,	ALTITUDE	5000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						2			2
0.8									
0.7				1	1	1			3
0.6									
SUM				1	1	3			5
TIME	2.4	0.8	1.3	23.0	115.0	135.7	0.1	0.	278.2

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	5000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						2			2
0.8									
0.7				1	1	1			3
0.6									
SUM				1	1	3			5
TIME	2.4	0.8	1.3	65.2	170.2	137.5	0.1	0.	377.6



TABLE LXII - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	ASCENT		
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3				1	2	1	1		5
1.2	31	5	5	4	17	18			85
0.8									
0.7			1	3	12	16			32
0.6									
SUM	31	5	6	13	31	35	1		121
TIME	284.9	65.3	165.6	824.8	1381.8	594.8	2.9	0.	3320.3

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MANUVR,	ALTITUDE	2000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.4										
1.3						1			1	
1.2					2	8			10	
0.8										
0.7					2	3			5	
0.6										
0.5						1			1	
0.4										
SUM					4	13			17	
TIME	0.	0.	0.	0.8	5.4	15.9	0.	0.	22.1	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MANUVR,	ALTITUDE	2000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3						1			1
1.2					2	8			10
0.8									
0.7					2	3			5
0.6									
0.5						1			1
0.4									
SUM					4	13			17
TIME	0.	0.	0.	0.8	5.4	15.9	0.	0.	22.1

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MANUVR		
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3						1			1
1.2					2	8			10
0.8									
0.7					2	3			5
0.6									
0.5						1			1
0.4									
SUM					4	13			17
TIME	0.	0.	0.	0.8	5.4	15.9	0.	0.	22.1

TABLE LXII - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	DESCNT,	ALTITUDE	LESS, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						1			1
0.8									
SUM						1			1
TIME	6.7	1.3	2.3	2.8	2.7	1.3	0.	0.	17.3

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	DESCNT,	ALTITUDE	LESS	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2						1			1
0.8									
SUM						1			1
TIME	9.2	2.9	4.9	5.2	2.9	1.3	0.	0.	26.5

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	DESCNT,	ALTITUDE	1000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	1	1			3	2			7
0.8									
0.7					1				1
0.6									
SUM	1	1			4	2			7
TIME	53.0	27.0	40.6	57.2	60.1	22.0	1.1	0.	260.9

MANEUVER	NZ PEAKS FOR		MU	VS	NZ	BY MISSION SEGMENT DESCNT,				ALTITUDE	1000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM		
1.3											
1.2	1	1			3	2			7		
0.8											
0.7					1				1		
0.6											
SUM	1	1			4	2			3		
TIME	76.4	43.1	78.7	93.4	80.4	27.5	1.1	0.	400.6		

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2				1	3	1			5
0.8									
0.7						1			1
0.6									
SUM				1	3	2			6
TIME	7.3	5.0	7.3	15.7	19.7	22.6	0.9	0.	78.4

TABLE LXII - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM		
1.5											
1.4					1				1		
1.3	2					1			3		
1.2	2			6	28	27	1		64		
0.8											
0.7				1	9	28	2		40		
0.6						3			3		
0.5											
SUM	4			7	38	59	3		111		
TIME	92.7	51.8	79.2	171.1	541.3	993.2	28.1	0.	1957.6		

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	0.09
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM		
1.5											
1.4	1								1		
1.3											
1.2	2				1				3		
0.8											
0.7											
0.6	1								1		
0.5											
SUM	4				1				5		
TIME	38.9	22.4	74.4	335.6	665.7	52.9	0.	0.	1189.9		

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.5										
1.4	1				1				2	
1.3	2					1			3	
1.2	4			7	32	28	1		72	
0.8										
0.7				1	9	29	2		41	
0.6	1					3			4	
0.5										
SUM	8			8	42	61	3		121	
TIME	138.9	79.2	160.9	522.3	1228.6	1068.7	29.0	0.	3227.7	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM		
1.3											
1.2					1	1	1		3		
0.8											
0.7					2	4			6		
0.6					1	1			2		
0.5											
SUM					4	6	1		11		
TIME	3.6	0.2	0.5	1.7	70.8	264.2	5.4	0.	346.9		

TABLE LXII - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1	1	1		3
0.8									
0.7					2	4			6
0.6					1	1			2
0.5									
SUM					4	6	1		11
TIME	3.6	0.2	1.8	18.1	130.2	274.7	5.4	0.	434.1

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT		
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.5									
1.4	1				1				2
1.3	2					1			3
1.2	5	1		7	36	32	2		83
0.8									
0.7				1	12	33	2		48
0.6	1				1	4			6
0.5									
SUM	9	1		8	50	70	4		142
TIME	228.2	125.4	246.2	639.0	1442.1	1372.3	35.6	0.	4088.8

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	1000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2	2				1				3	
0.8										
SUM	2				1				3	
TIME	7.2	2.1	0.	0.	3.1	0.2	0.	0.	12.6	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	1000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.4										
1.3	1								1	
1.2	2								2	
0.8										
0.7	1								1	
0.6										
SUM	4								4	
TIME	125.5	12.6	3.6	0.8	10.9	5.7	0.7	0.	159.9	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	1000, CT/S	0.09
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2	1								1	
0.8										
SUM	1								1	
TIME	19.9	0.8	0.	0.	0.	0.	0.	0.	20.7	

TABLE LXII - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	1000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3	1								1
1.2	5				1				6
0.8									
0.7	1								1
0.6									
SUM	7				1				8
TIME	152.7	15.5	3.6	0.8	14.0	5.9	0.7	0.	193.2

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	STEADY,	ALTITUDE	2000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
0.8									
0.7						1			1
0.6									
SUM						1			1
TIME	11.7	0.6	0.	0.	0.	9.9	0.	0.	22.2

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	STEADY,	ALTITUDE	2000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	3				1	25			29
0.8									
0.7	3		1		4	36	1		45
0.6						2			2
0.5									
SUM	6		1		5	63	1		76
TIME	273.2	21.8	2.8	34.8	427.0	1327.6	11.6	0.	2098.8

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	STEADY,	ALTITUDE	2000, CT/S	0.09
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	3				3				6
0.8									
0.7				1	2				3
0.6									
SUM	3			1	5				9
TIME	53.1	3.6	20.8	278.6	1136.2	52.6	0.	0.	1544.9

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	STEADY,	ALTITUDE	2000	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	6				4	25			35
0.8									
0.7	3		1	1	6	37	1		49
0.6						2			2
0.5									
SUM	9		1	1	10	64	1		85
TIME	338.0	26.0	23.6	313.4	1563.6	1390.0	11.6	0.	3668.2

TABLE LXII - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	5000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2					1	5			6	
0.8										
0.7					2	4			6	
0.6										
SUM					3	9			12	
TIME	1.2	0.5	1.1	4.3	223.6	686.6	2.6	0.	919.9	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	5000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2					1	5			6
0.8									
0.7					2	4			6
0.6									
SUM					3	9			12
TIME	1.2	0.5	1.6	39.2	321.7	728.2	2.6	0.	1095.1

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY		
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.4									
1.3	1								1
1.2	11				6	30			47
0.8									
0.7	4		1	1	8	41	1		56
0.6						2			2
0.5									
SUM	16		1	1	14	73	1		106
TIME	509.6	45.1	34.2	353.4	1899.4	2124.1	15.0	0.	4980.8

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MOIST,	ALTITUDE	LESS, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2	1								1	
0.8										
SUM	1								1	
TIME	0.2	0.	0.	0.	0.	0.	0.	0.	0.2	

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MOIST,	ALTITUDE	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.3									
1.2	1								1
0.8									
SUM	1								1
TIME	0.3	0.	0.	0.	0.	0.	0.	0.	0.3

TABLE LXII - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MOIST,	ALTITUDE	1000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.5										
1.4	1								1	
1.3	1								2	
1.2	8	1							9	
0.8										
0.7	2								2	
0.6										
SUM	12	1							13	
TIME	1.2	0.1	0.	0.	0.	0.	0.	0.	1.3	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MOIST,	ALTITUDE	1000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.6										
1.5	1								1	
1.4	2								2	
1.3	1								3	
1.2	9	1							10	
0.8										
0.7	5								5	
0.6	1								2	
0.5										
SUM	19	1							20	
TIME	3.0	0.5	0.	0.	0.	0.	0.	0.	3.5	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MOIST,	ALTITUDE	1000, CT/S	0.09
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2	8	1							9	
0.8										
0.7	3								3	
0.6										
SUM	11	1							12	
TIME	0.7	0.1	0.	0.	0.	0.	0.	0.	0.8	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MOIST,	ALTITUDE	1000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6									
1.5	1								1
1.4	3								3
1.3	2								2
1.2	25	3							28
0.8									
0.7	10								10
0.6	1								1
0.5									
SUM	42	3							45

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MOIST,	ALTITUDE	2000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM	
1.3										
1.2	4								4	
0.8										
SUM	4								4	
TIME	0.8	0.	0.	0.	0.	0.	0.	0.	0.8	

TABLE LXII - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HOIST,	ALTITUDE	2000, CT/S	0.06
		LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.8										
1.7			1							1
1.6										
1.5	1									1
1.4	2									2
1.3	4									4
1.2	18									18
0.8										
0.7	8	1								9
0.6										
SUM	33	2								35
TIME	5.0	0.4	0.	0.	0.	0.	0.	0.	0.	5.4

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HOIST,	ALTITUDE	2000, CT/S	0.09
		LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.6										
1.5	1									1
1.4	1									1
1.3	2									2
1.2	14	3								17
0.8										
0.7	4									4
0.6										
0.5	1									1
0.4										
SUM	23	3								26
TIME	1.3	0.4	0.	0.	0.	0.	0.	0.	0.	1.7

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	HOIST,	ALTITUDE	2000
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.8									
1.7		1							1
1.6									
1.5	2								2
1.4	3								3
1.3	6								6
1.2	36	3							39
0.8									
0.7	12	1							13
0.6									
0.5	1								1
0.4									
SUM	60	5							65
TIME	7.1	0.8	0.	0.	0.	0.	0.	0.	8.0



TABLE LXII - Concluded

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	HOIST	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.8									
1.7		1							1
1.6									
1.5	3								3
1.4	6								6
1.3	8								8
1.2	62	6							68
0.8									
0.7	22	1							23
0.6	1								1
0.5	1								1
0.4									
SUM	103	8							111
TIME	12.4	1.5	0.	0.	0.	0.	0.	0.	14.0

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ				
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	SUM
1.8									
1.7		1							1
1.6									
1.5	3								3
1.4	7				1				8
1.3	11			1	2	3	1		18
1.2	109	12	5	16	61	88	2		293
0.8									
0.7	26	1	2	5	34	93	3		164
0.6	2				1	6			9
0.5	1					1			2
0.4									
SUM	159	14	7	22	99	191	6		498
TIME	1035.1	237.3	446.1	1817.9	4728.8	4107.2	53.5	0.	12426.0

TABLE LXIII. MANEUVER  $n_z$  PEAKS FOR AIRSPEED VERSUS  $n_z$  BY WEIGHT, ALTITUDE AND MISSION SEGMENT, SAMPLE II

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1-3							1									1
1-2																
0-8							1									1
SUM																
TIME	11.5	4.5	1.7	1.6	1.6	0.8	1.4	0.4	0.4	0.	0.	0.	0.	0.	0.	23.9

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 1000, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1-3																
1-2	1															1
0-8																
SUM	1															1
TIME	0.1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.1

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1-3																
1-2	1						1									2
0-8																
SUM	1						1									2
TIME	14.3	5.0	2.1	1.6	1.6	0.8	1.6	0.4	0.4	0.	0.	0.	0.	0.	0.	27.8

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1-3																
1-2					2			1				1				4
0-8																
0-7									1	1	1	1				4
0-6																
SUM					2			1	1	1	1	2				8
TIME	17.1	14.2	3.5	4.8	7.3	10.5	15.6	14.5	13.5	12.7	11.9	1.6	0.	0.	0.	127.4

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0-8																
0-7								1								2
0-6																
SUM								1	1							2
TIME	11.5	0.	0.1	1.3	4.4	1.1	1.7	11.4	11.2	9.9	1.8	0.	0.	0.	0.	44.5

MANEUVER $n_z$ PEAKS FOR VELOCITY VS $n_z$ BY WEIGHT 21000, ALTITUDE 2000, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1-3																
1-2	3															3
0-8																
SUM	3															3
TIME	0.4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.4

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3				2			1				1				7
0.8																
0.7								1	2	1	1	1				6
0.6																
SUM	3				2			2	2	1	1	2				13
TIME	35.3	19.1	4.6	7.7	12.6	14.8	21.5	30.8	28.0	22.8	13.8	1.6	0.	0.	0.	212.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000, ALTITUDE 5000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7									1							1
0.6																
SUM									1							1
TIME	0.	1.6	0.6	0.3	0.1	0.0	0.1	0.	0.4	1.4	0.3	0.	0.	0.	0.	5.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7									1							1
0.6																
SUM									1							1
TIME	0.	1.6	0.6	0.3	0.1	1.7	2.4	3.3	3.4	3.7	1.0	0.2	0.	0.	0.	18.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 21000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	4				2		1	1				1				9
0.8																
0.7								1	3	1	1	1				7
0.6																
SUM	4				2		1	2	3	1	1	2				15
TIME	50.9	26.1	7.3	9.6	14.3	17.3	29.6	34.4	22.0	26.6	14.8	1.8	0.	0.	0.	260.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE LESS, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2								1								1
0.8																
SUM								1								1
TIME	6.2	3.2	0.2	0.4	0.1	0.4	0.3	0.	0.	0.	0.	0.	0.	0.	0.	10.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE LESS, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SUM	1															1
TIME	0.1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.1

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1						1									2
0.8																
SUM	1						1									2
TIME	19.8	4.2	0.8	0.4	0.1	0.4	0.3	0.	0.	0.	0.	0.	0.	0.	0.	19.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	8			1					1							10
0.8																
SUM	8			1					1							10
TIME	20.4	7.0	1.6	2.0	3.4	1.7	0.8	0.3	0.9	0.3	0.	0.	0.	0.	0.	78.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1		1	1				1								4
0.8																
SUM	1		1	1				1								4
TIME	48.2	27.2	7.8	6.4	6.0	7.9	6.4	9.6	3.3	2.2	0.4	0.	0.	0.	0.	121.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	2						1									3
0.8																
SUM	2						1									3
TIME	30.7	0.	0.	0.1	1.0	1.2	4.1	0.2	2.0	1.6	0.	0.	0.	0.	0.	40.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	2															2
1.3	1															1
1.2	12															12
0.8																
0.7	4															4
0.6	1															1
0.5																
SUM	20															20
TIME	2.4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	2															2
1.3	1															1
1.2	23		1	2			1	1	1							29
0.8																
0.7	4															4
0.6	1															1
0.5																
SUM	31		1	2			1	1	1							37
TIME	101.7	34.2	9.3	8.5	10.4	10.8	11.3	6.1	6.3	4.1	0.4	0.	0.	0.	0.	203.0

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.4						1	1								2	
1.3							2		1						29	
1.2	15	2		2	2											
0.8					1	1	1		1						6	
0.7																
0.6																
SUM	15	2		2	3	2	4	3	2						33	
TIME	42.5	69.2	29.3	35.0	31.2	49.0	54.4	58.2	41.2	16.4	3.7	0.2	0.	0.	0.	426.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT DESCENT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.5						1									1	
1.4							1								1	
1.3																
1.2	1	3	2	2	4	7	6	3	3	1	1				35	
0.8		1														
0.7							5	3	3			1	1		16	
0.6								1							1	
0.5																
SUM	1	4	2	2	4	8	11	7	6	4	1	1	1		54	
TIME	83.8	57.9	31.2	35.4	52.4	60.0	93.3	121.1	132.1	88.1	36.7	10.5	0.3	0.	0.	802.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT STEADY																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3							1	2	4	4	2				11	
1.2																
0.8																
0.7	2					2	1	3	6	7	1				22	
0.6										2					2	
0.5																
SUM	2					2	2	3	8	11	3				39	
TIME	82.2	2.2	7.7	10.7	13.2	32.9	83.3	129.3	117.2	96.9	18.8	6.4	0.	0.	0.	585.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000, MISSION SEGMENT MOIST																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.8																
1.7	1														1	
1.6																
1.5	1														1	
1.4																
1.3	1														1	
1.2	12														12	
0.8																
0.7	7														7	
0.6																
SUM	22														22	
TIME	3.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 2000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.8																
1.7	1														1	
1.6																
1.5	1														1	
1.4						1									1	
1.3	1						1	2							4	
1.2	28	5	2	2	6	9	7	7	8	6	3				83	
0.8																
0.7	9	1				3	7	7	10	1	1	1	1		51	
0.6									1		2				3	
0.5																
SUM	40	6	2	2	6	13	15	16	14	17	6	1	1		144	
TIME	211.5	129.3	64.1	81.0	96.7	141.9	231.0	304.8	290.5	195.3	59.2	11.1	0.3	0.	0.	1817.1

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSION SEGMENT ASCENT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2								1	1							2
0.8																
0.7							1									1
0.6																
SUM							1	1	1							3
TIME	0.2	3.5	3.2	5.3	8.3	14.2	17.5	18.1	9.1	7.6	1.2	1.6	0.	0.	0.	89.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSION SEGMENT DESCENT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2				1												1
0.8																
0.7							1	1		1						3
0.6							1									1
0.5																
SUM				1			2	1		1						5
TIME	0.	1.1	0.8	1.0	2.3	7.4	22.4	30.6	32.8	23.5	9.2	1.4	0.	0.	0.	132.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000, MISSION SEGMENT STEADY																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2								2	1							3
0.8																
0.7							2									2
0.6																
SUM							2	2								5
TIME	0.	0.	0.	0.9	2.8	32.0	55.7	72.8	69.4	32.1	10.0	2.3	2.4	0.	0.	300.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000, ALTITUDE 5000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2				1				3	2							6
0.8																
0.7						2	2	1		1						6
0.6							1									1
0.5																
SUM				1	2	3	4	2	1							13
TIME	0.2	4.6	4.0	7.2	13.3	53.6	99.7	121.5	131.4	63.1	20.4	5.3	2.4	0.	0.	522.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 23000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.8																
1.7	1															1
1.6																
1.5	1															1
1.4	2					1		2								3
1.3	2															2
1.2	52	5	3	4	7	9	9	11	14	6	3					120
0.8																
0.7	13	1				5	9	8	10	12	1	1	1			61
0.6	1						1		1	2						5
0.5																
SUM	72	6	3	4	7	15	20	21	22	18	6	1	1			195
TIME	327.2	172.2	78.3	97.1	120.4	206.7	339.3	431.4	478.2	262.6	80.0	16.4	2.7	0.	0.	2462.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSION SEGMENT ASCENT																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2	1															1
0.8																
SUM	1															1
TIME	4.3	0.4	0.	0.	0.7	0.8	0.6	0.1	0.	0.	0.	0.	0.	0.	0.	6.3

TABLE LXIII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE LESS															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2	1															1
0.8																
SUM	1															1
TIME	23.9	1.4	0.	0.	0.2	1.6	1.1	0.2	0.	0.	0.	0.	0.	0.	0.	26.3

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, MISSION SEGMENT ASCENT															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2	7	1														8
0.8																
SUM	7	1														8
TIME	30.6	10.5	3.4	3.6	2.3	1.8	1.5	2.2	0.4	0.4	0.	0.	0.	0.	0.	56.8

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, MISSION SEGMENT DESCENT															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.3																
1.2	1						1									2
0.8																
0.7					1											1
0.6																
SUM	1				1		1									3
TIME	50.8	24.4	7.1	6.0	4.9	6.1	3.9	2.6	2.0	1.5	0.	0.	0.	0.	0.	109.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, MISSION SEGMENT STADY															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.4																
1.3	1															1
1.2	4															2
0.8																
0.7	1															1
0.6																
SUM	4															4
TIME	69.7	0.6	1.5	1.7	2.6	1.1	0.3	0.7	0.	0.	0.	0.	0.	0.	0.	78.0

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000, MISSION SEGMENT MOIST															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.6																
1.5	1															1
1.4	1															1
1.3	1															1
1.2	6															6
0.8																
0.7	3															3
0.6																
SUM	12															12
TIME	1.6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.6

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 1000															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1.6																
1.5	1															1
1.4	1															1
1.3	2															2
1.2	16	1					1									19
0.8																
0.7	4				1											5
0.6																
SUM	24	1			1		1									27
TIME	152.6	35.5	12.0	11.3	9.8	9.0	9.6	5.5	2.3	1.9	0.	0.	0.	0.	0.	245.6

TABLE LXIII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3		1					1				1					3
1.2	6	2	3	1	1	1	4	1	1	3						23
0.8																
0.7		1		1	1	1	3	1	3	3						14
0.6																
SUM	6	4	3	2	2	2	8	2	4	6	1					40
TIME	64.6	87.1	45.7	59.3	60.3	90.5	76.3	66.6	50.4	29.9	7.0	0.3	0.	0.	0.	637.8

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT MANIWR															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3								1								1
1.2							1	3	1							5
0.8																
0.7							2	1								3
0.6																
0.5								1								1
0.4																
SUM							3	4	1							10
TIME	0.	0.	0.	0.	0.	0.3	3.2	6.0	2.7	0.0	0.	0.	0.	0.	0.	12.3

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT DESCNT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	2															2
1.2	1	3		1		6	3	7	4	3	2					28
0.8																
0.7				1	2	1	4	6	1		2	1				18
0.6							1	1								2
0.5																
SUM	3	3		2	2	7	8	14	5	3	4	1				50
TIME	87.0	59.0	23.7	29.5	42.6	86.3	117.2	124.3	101.1	78.2	41.4	7.5	0.3	0.	0.	797.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT STEADY															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3							5	5	3						16
0.8																
0.7	1						3	3	7	1						15
0.6																
SUM	4						3	6	12	4						31
TIME	130.2	8.1	7.7	11.7	43.2	90.4	143.9	200.6	206.8	91.0	32.5	5.4	0.	0.	0.	971.5

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000, MISSION SEGMENT HOIST															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3	2															2
1.2	7															7
0.8																
0.7	2															2
0.6																
SUM	12															12
TIME	1.4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.4



TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3	4															4
1.2	17	5	3	2	1	7	8	16	4	9	2					79
0.8																
0.7	3	1		2	3	2	12	11	11	4	2	1				52
0.6							1	1								2
0.5								1								1
0.4																
SUM	25	7	3	4	4	9	22	30	20	13	5	1				143
TIME	283.2	153.2	77.1	100.5	146.1	267.5	340.7	397.5	361.0	199.1	80.9	13.2	0.3	0.	0.	2420.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7		1														1
0.6																
SUM		1														1
TIME	4.4	8.5	3.7	7.3	11.2	20.7	24.9	29.0	23.7	11.4	1.8	0.1	0.	0.	0.	146.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									1		1					2
0.8																
0.7						1				1						2
0.6									1							1
0.5																
SUM						1			2	1	1					5
TIME	4.3	0.4	1.4	3.0	8.5	11.1	24.9	37.0	40.7	27.9	10.9	1.9	0.	0.	0.	171.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						1		1	1							3
0.8																
0.7								3								4
0.6																
0.5																
SUM						1		4	2							7
TIME	2.4	1.6	0.4	7.4	13.7	35.8	101.2	75.2	106.4	57.1	12.7	0.	0.	0.	0.	440.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2						1		1	2		1					5
0.8																
0.7		1				1		3	1	1						7
0.6									1							1
0.5																
SUM		1				2		4	4	1	1					13
TIME	11.0	10.5	5.5	17.7	33.3	67.6	150.4	141.1	170.8	122.4	25.5	2.0	0.	0.	0.	757.9

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 25000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.6																
1.5	1															1
1.4	2															2
1.3	6	1					1	1			1					10
1.2	34	6	3	2	1	8	9	17	11	9	3					103
0.8																
0.7	7	2		2	4	3	12	14	12	9	2	1				64
0.6							1	1	1							3
0.5								1								1
0.4																
SUM	50	9	3	4	5	11	23	34	24	14	6	1				144
TIME	470.7	200.6	94.6	129.3	189.5	349.7	497.7	544.3	534.1	323.4	106.4	15.3	0.3	0.	0.	3452.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1				1											2
0.8																
SUM	1				1											
TIME	16.3	7.6	2.9	3.6	1.8	0.4	0.3	0.7	0.	0.	0.	0.	0.	0.	0.	33.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1				1											2
0.8																
SUM	1				1											2
TIME	42.4	13.2	3.4	5.7	4.0	4.8	2.2	2.0	0.1	0.1	0.9	1.2	0.3	0.2	0.	80.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3	1		1	2		1	1	1		2					12
0.8																
0.7			1			1	2	1								5
0.6																
SUM	3	1	1	1	2	1	3	2	1		2					17
TIME	31.2	32.8	24.3	29.5	31.0	33.2	37.5	30.3	26.1	15.4	4.9	0.1	0.	0.	0.	296.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2			1			1			1	1						5
0.8																
0.7					1		1									2
0.6																
SUM			1		1	1	1		1	1						7
TIME	0.	0.8	0.3	0.6	0.9	0.9	1.0	2.4	2.	0.2	0.	0.	0.	0.	0.	9.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2				1				1								2
0.8																
0.7							1	1								2
0.6																
SUM				1			1	2								4
TIME	14.0	12.0	4.1	6.5	4.4	13.6	25.9	36.1	41.7	36.9	12.2	1.6	0.2	0.	0.	219.3

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2									1	1						2
0.8																
0.7	1						1	1	3	1						7
0.6																
SUM	1						1	1	4	2						9
TIME	27.7	0.	1.9	12.9	4.8	20.8	99.8	81.9	104.4	66.4	24.9	0.3	0.	0.	0.	401.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000, MISSION SEGMENT MUST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2																
SUM	1															1
TIME	0.3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	3	1	1	2	2	1	1	2	4	2	2					21
0.8																
0.7	1		1		1	1	5	3	3	1						16
0.6																
SUM	5	1	2	2	3	2	6	5	7	3	2					38
TIME	78.2	45.6	30.2	49.1	46.0	68.5	120.2	150.7	174.4	119.5	61.6	2.0	0.2	0.	0.	926.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 5000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7											1					1
0.6																
SUM											1					1
TIME	0.	0.	0.	0.7	0.1	0.6	1.3	4.2	8.4	5.3	1.3	0.3	0.	0.	0.	22.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000, ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7											1					1
0.6																
SUM											1					1
TIME	0.	3.6	9.5	7.1	3.7	7.3	17.7	43.1	61.1	40.1	20.1	0.3	0.	0.	0.	209.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 27000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	4	1	1	2	3	1	1	2	4	2	2					23
0.8																
0.7	1		1		1	1	5	3	3	1	1					17
0.6																
SUM	6	1	2	2	4	2	6	5	7	3	3					41
TIME	126.8	63.2	39.3	62.0	53.8	80.6	140.2	196.5	216.4	159.8	62.6	3.4	0.5	0.2	0.	1229.4

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8										1						2
0.7		1														
0.6																
SUM		1								1						2
TIME	1.8	2.1	3.8	3.4	4.6	3.4	4.7	6.5	7.8	4.2	1.8	0.	0.	0.	0.	44.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8										1						1
0.7																
0.6																
SUM										1						1
TIME	6.7	0.7	0.4	0.9	1.0	2.5	3.1	6.8	8.4	2.2	0.7	0.5	0.	0.	0.	33.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8										2						3
0.7		1														
0.6																
SUM		1								2						3
TIME	20.7	2.9	4.2	4.3	5.6	5.9	7.9	15.5	35.3	15.2	8.2	0.5	0.	0.	0.	126.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 29000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8										2						3
0.7		1														
0.6																
SUM		1								2						3
TIME	40.0	5.2	5.5	5.1	7.0	7.5	9.9	19.1	54.4	22.5	11.1	0.5	0.	0.	0.	187.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 33000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3					1											1
1.2																
0.8																
0.7						1										1
0.6																
SUM					1	1										2
TIME	18.6	5.4	2.1	14.4	17.4	10.4	4.2	0.3	0.	0.	0.	0.	0.	0.	0.	72.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 33000, ALTITUDE 2000, MISSION SEGMENT HUIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4		1														1
1.3																
SUM		1														1
TIME	0.3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.3

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 33000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2					1											1
0.8																
0.7						1										1
0.6																
SUM	1				1	1										3
TIME	32.8	39.6	7.6	23.4	37.6	21.0	7.3	1.3	0.1	0.	0.	0.	0.	0.	0.	170.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 33000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2					1											1
0.8																
0.7						1										1
0.6																
SUM	1				1	1										3
TIME	51.5	39.9	7.6	23.4	37.6	21.0	7.3	1.3	0.1	0.	0.	0.	0.	0.	0.	189.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 33000, ALTITUDE 2000, MISSION SEGMENT MOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	1															1
0.8	-															
0.7	1															1
0.6																
SUM	3															3
TIME	0.2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 35000, ALTITUDE 2000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.4																
1.3	1														1	
1.2	1														1	
0.8																
0.7	1														1	
0.6																
SUM	3														3	
TIME	34.4	44.7	27.9	54.9	46.6	26.0	6.2	2.9	0.3	0.	0.	0.	0.	0.	243.9	

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 35000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	1															1
0.8																
0.7	1															1
0.6																
SUM	3															3
TIME	41.9	46.3	29.1	57.4	49.1	26.6	6.9	2.9	0.1	0.	0.	0.	0.	0.	0.	260.5

TABLE LXIII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 1000, MISSION SEGMENT HOIST															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3															3
0.8																
SUP	3															3
TIME	0.1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.1

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 1000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3															3
0.8																
SUM	3															3
TIME	13.5	5.8	2.0	0.7	1.2	0.2	0.2	0.2	0.	0.	0.	0.	0.	0.	0.	23.8

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
0.8																
0.7		1														1
0.6																
SUM		1														1
TIME	15.9	24.7	12.9	16.7	14.2	8.5	1.4	0.4	1.1	0.2	0.	0.	0.	0.	0.	96.3

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 2000, MISSION SEGMENT STEADY															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SUM	1															1
TIME	9.2	19.5	18.8	33.3	31.1	25.5	1.7	0.	0.	0.	0.	0.	0.	0.	0.	139.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 2000, MISSION SEGMENT HOIST															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	3															3
0.8																
SUM	3															3
TIME	0.2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.2

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000, ALTITUDE 2000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	4															4
0.8																
0.7		1														1
0.6																
SUM	4	1														5
TIME	39.4	94.0	58.3	71.6	67.1	47.7	11.7	9.8	6.7	2.9	0.	0.	0.	0.	0.	398.2

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 36000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	7															7
0.8																
0.7		1														1
0.6																
SUM	7	1														8
TIME	55.2	95.9	64.3	86.7	83.3	54.8	23.9	24.8	18.1	3.2	0.	0.	0.	0.	0.	510.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 1000, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	4															4
0.8																
0.7	2															2
0.6																
SUM	6															6
TIME	0.3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	4															4
0.8																
0.7	2															2
0.6																
SUM	6															6
TIME	26.8	7.6	2.8	2.0	1.7	1.7	0.6	0.2	0.	0.	0.	0.	0.	0.	0.	43.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2		1														1
0.8																
SUM		1														1
TIME	22.4	42.0	37.0	41.5	21.0	16.7	10.3	3.0	0.1	0.	0.	0.	0.	0.	0.	194.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 2000, MISSION SEGMENT DESCENT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2	1			1												2
0.8																
0.7																
0.6	1															1
0.5																
SUM	3			1												4
TIME	29.6	59.6	33.9	46.2	44.7	19.8	16.8	3.4	2.5	0.	0.	0.	0.	0.	0.	255.5

TABLE LXIII - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000, ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2	1	1		1												3
0.8																
0.7																
0.6	1															1
0.5																
SUM	3	1		1												5
TIME	53.9	122.2	124.2	175.7	136.5	74.9	31.4	8.4	2.6	0.	0.	0.	0.	0.	0.	779.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 37000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.5																
1.4	1															1
1.3																
1.2	5	1		1												7
0.8																
0.7	2															2
0.6	1															1
0.5																
SUM	9	1		1												11
TIME	91.3	164.5	136.4	182.9	152.7	89.3	36.2	13.3	5.2	0.	0.	0.	0.	0.	0.	971.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 1000, MISSION SEGMENT HOIST																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SUM	1															1
TIME	0.2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SUM	1															1
TIME	29.0	11.1	3.6	1.8	1.4	1.7	0.1	0.	0.	0.	0.	0.	0.	0.	0.	49.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SUM	1															1
TIME	27.7	43.6	43.1	41.4	37.4	26.3	11.3	5.9	1.0	0.	0.	0.	0.	0.	0.	237.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.4				1												1
0.8																
SUM				1												1
TIME	9.1	20.5	25.6	45.2	82.1	43.1	19.6	15.8	0.	0.	0.	0.	0.	0.	0.	260.1



TABLE LXIII - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000, MISSION SEGMENT HOIST															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1-3																
1-2	4															4
0-8																
0-7	1															1
0-6																
SUM	5															5
TIME	0.4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.4

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000, ALTITUDE 2000															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1-3																
1-2	5			1												6
0-8																
0-7	1															1
0-6																
SUM	6			1												7
TIME	77.4	145.2	129.5	130.8	149.4	81.7	34.6	22.1	1.3	0.	0.	0.	0.	0.	0.	767.6

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 38000															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1-3																
1-2	6			1												7
0-8																
0-7	1															1
0-6																
SUM	7			1												8
TIME	109.9	171.0	147.5	153.2	167.7	98.4	36.1	24.1	1.0	0.	0.	0.	0.	0.	0.	908.9

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 1000, MISSION SEGMENT HOIST															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1-3																
1-2	1															1
0-8																
0-7	1															1
0-6																
SUM	2															2
TIME	0.1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.1

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 1000															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1-3																
1-2	1															1
0-8																
0-7	1															1
0-6																
SUM	2															2
TIME	23.9	12.2	2.2	0.8	0.7	0.9	0.2	0.	0.	0.	0.	0.	0.	0.	0.	40.9

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 2000, MISSION SEGMENT STEADY															SUM
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	
1-3																
1-2	1				1											2
0-8																
0-7				1												1
0-6																
SUM	1			1	1											3
TIME	12.7	37.6	79.2	90.7	72.5	39.5	27.0	15.1	0.	0.	0.	0.	0.	0.	0.	376.3

TABLE LXIII - Continued

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000, ALTITUDE 2000, MISSION SEGMENT MOIST															
		LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																	
1.3		1															1
1.2		3															3
0.8																	
SUM		4															4
TIME		0.2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.2

MANEUVER NZ		PEAKS FOR VELOCITY VS					NZ BY WEIGHT 39000,			ALTITUDE 2000							
	LFSS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.4																	
1.3	1															1	
1.2	4				1											5	
0.8																	
0.7				1												1	
0.6																	
SUM	5			1	1											7	
TIME	61.7	133.6	145.2	169.0	148.1	73.1	36.0	20.7	0.	0.	0.	0.	0.	0.	0.	787.4	

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 39000														
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.4																
1.3	1															1
1.2	5				1											6
0.8																
0.7	1			1												2
0.6																
SUM	7			1	1											9
TIME	87.9	154.7	151.5	174.1	150.6	84.9	42.4	22.6	0.	0.	0.	0.	0.	0.	0.	868.8

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 1000, MISSION SEGMENT STEADY															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																
1.2	1															1
0.8																
SUM	1															1
TIME	5.5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.5

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 1000															
		LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																	
1.2		1															1
0.8																	
SUM		1															1
TIME		42.4	16.9	3.8	2.3	0.7	0.3	0.1	0.	0.	0.	0.	0.	0.	0.	0.	66.5

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY W/FIGHT 40000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
		LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
1.3																	
1.2						1											1
0.8																	
0.7						1											1
0.6																	
SUM						2											2
TIME		59.5	119.1	74.0	60.0	36.0	14.7	3.5	0.	0.	0.	0.	0.	0.	0.	0.	362.4

TABLE LXIII - Concluded

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000, MISSION SEGMENT STEADY																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.3																
1.2	1															1
0.8																
0.7		1														1
0.6																
SUM	1	1														2
TIME	24.9	59.1	63.2	83.5	37.0	37.6	23.4	5.0	0.	0.	0.	0.	0.	0.	0.	335.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000, MISSION SEGMENT HOIST																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.6																
1.5	1															1
1.4	1															1
1.3																
1.2	6															6
0.8																
0.7	2															2
0.6																
0.5	1															1
0.4																
SUM	11															11
TIME	0.6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000, ALTITUDE 2000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.6																
1.5	1															1
1.4	1															1
1.3																
1.2	7				1											8
0.8																
0.7	2	1			1											4
0.6																
0.5	1															1
0.4																
SUM	12	1			2											15
TIME	99.1	220.0	167.8	183.4	104.0	62.8	33.5	8.6	0.7	0.	0.	0.	0.	0.	0.	880.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 40000																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.6																
1.5	1															1
1.4	1															1
1.3																
1.2	8				1											9
0.8																
0.7	2	1			1											4
0.6																
0.5	1															1
0.4																
SUM	13	1			2											16
TIME	145.1	241.4	176.8	198.3	109.3	68.8	37.0	10.0	1.0	0.	0.	0.	0.	0.	0.	987.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ																
LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
1.8																
1.7	1															1
1.6																
1.5	3															3
1.4	7					1										7
1.3	11	1					2	3		1						17
1.2	126	13	7	10	15	18	20	31	20	47	5	4				203
0.8																
0.7	28	6	1	3	6	10	16	25	21	5	5	4				104
0.6	2						2	1		2						7
0.5	1							1								1
0.4																
SUM	179	20	8	13	27	29	50	62	54	38	16	4	1			498
TIME	1666.8	1409.2	958.7	1182.4	1143.9	1104.9	1203.0	1326.4	1311.1	798.1	174.9	172.5	13.5	0.4	0.	12945.0

TABLE LXIV.  $n_x$  PEAKS FOR AIRSPEED VERSUS  $n_x$  BY WEIGHT,  
SAMPLE II

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 21000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-C.20																
-C.15											2					2
-C.10																
C.10																
C.15	2															2
C.20																
SUP	2										2					4
MEAN	50.9	26.1	7.3	9.6	14.7	17.3	25.6	34.4	32.0	26.6	14.8	1.8	0.	0.	0.	260.7

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 23000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-C.25																
-C.20																
-C.15								1	2	1	1	3				9
-C.10																
C.10	3															3
C.15	20															20
C.20	10															10
C.25																
SUP	33							1	2	1	3	3				43
MEAN	327.2	172.2	78.3	97.1	120.4	206.7	335.3	432.4	428.2	262.6	80.0	16.4	2.7	0.	0.	2562.5

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 25000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-C.20																
-C.15											1	4	1			6
-C.10																
C.10	7	3	1													11
C.15	32	1														33
C.20	4															4
C.25																
C.30	1															1
C.35																
SUP	44	4	1							1	4	1				55
MEAN	470.7	200.6	94.6	129.5	189.4	245.7	497.7	544.3	534.1	323.4	106.4	15.3	0.3	0.	0.	3452.0

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 27000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-C.20																
-C.15												1				1
-C.10																
C.10	2															2
C.15	5															5
C.20	1															1
C.25																
SUP	8											1				9
MEAN	120.8	63.2	39.3	62.0	57.7	90.6	140.2	196.5	236.5	159.8	62.6	3.4	0.5	0.2	0.	1225.4

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 29000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.15																
C.20	3															3
C.25																
SUP	3															3
MEAN	40.0	5.2	0.5	0.1	7.7	7.5	4.9	19.1	54.4	22.5	11.1	0.5	0.	0.	0.	187.6

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 35000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-C.10																
C.10	1															1
C.15	1															1
C.20	3															3
C.25																
SUP	5															5
MEAN	44.7	46.3	27.1	57.4	49.1	26.6	6.9	2.7	0.3	0.	0.	0.	0.	0.	0.	260.5

TABLE LXIV - Concluded

	NX PEAKS FOR			AIRSPED	VS	NX	BY	WEIGHT	36000									
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM		
C.1C																		
C.1S	3		1													4		
C.2C	2															2		
C.2S	1															1		
C.30																		
SUM	6		1													7		
MINS	55.2	95.9	64.3	86.7	83.1	54.8	23.9	24.8	18.4	3.2	0.	0.	0.	0.	0.	510.6		

	NX PEAKS FOR			AIRSPED	VS	NX	BY	WEIGHT	37000							
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
C.1C																
C.1S	6															6
C.2C	4															4
C.2S																
SUM	10															10
MINS	91.3	164.5	136.4	182.9	152.7	99.3	34.2	13.3	5.2	0.	0.	0.	0.	0.	0.	871.9

	NX PEAKS FOR			AIRSPED	VS	NX	BY	WEIGHT 38000										
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM		
-0.1C																		
0.1C	1															1		
0.1S	12															12		
0.2C	4															4		
0.2S																		
SUM	17															17		
MINS	109.9	171.0	147.5	153.2	167.7	98.4	36.1	24.1	1.0	0.	0.	0.	0.	0.	0.	908.9		

	NX PEAKS FOR			AIRSPED	VS	NX	BY	WEIGHT	39000								
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
C.1C																	
C.1S	3															3	
C.2C	4															4	
C.2S																	
SUM	7															7	
MINS	87.9	154.7	151.5	174.1	150.6	84.9	42.4	22.6	0.	0.	0.	0.	0.	0.	0.	868.9	

	NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 40000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.1C																
0.1C			1													1
0.1S	4															4
0.2C	2															2
0.2S	2															2
0.30																
SUM	8		1													9
MINS	145.1	241.4	176.0	198.3	109.3	68.8	37.0	10.0	1.0	0.	0.	0.	0.	0.	0.	987.7

TABLE LXV.  $n_x$  PEAKS FOR AIRSPEED VERSUS  $n_x$  BY ALTITUDE, SAMPLE II

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE LESS																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10	1															1
0.15	4															4
0.20																
SUM	5															5
MIN	62.6	8.5	1.4	0.6	0.6	2.3	2.1	0.9	0.7	0.1	0.1	0.	0.	0.	0.	79.8

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE 1000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.10																
0.10	3															3
0.15	31															31
0.20	14															14
0.25	2															2
0.30																
SUM	50															50
MIN	505.7	145.4	42.3	35.7	33.8	30.8	27.6	14.8	9.2	6.1	1.3	1.2	0.3	0.2	0.	849.6

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE 2000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20																
-0.15								1	2	2	1	4				16
-0.10																
0.10	13	1	1													12
0.15	53	1	1													55
0.20	23															23
0.25	1															1
0.30	1															1
0.35																
SUM	88	2	2					1	2	2	8	4				109
MIN	1037.2	1162.3	853.4	1053.9	998.3	896.9	883.1	973.6	901.2	553.9	203.8	28.5	0.8	0.	0.	9589.7

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15											1	1				2
-0.10																
0.10		2	1													3
0.15																
SUM		2	1								1	1				5
MIN	12.3	73.1	59.6	42.5	111.2	189.8	295.0	337.1	400.2	239.3	67.7	7.8	2.4	0.	0.	1106.8

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE 5000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20																
-0.15								1	2	2	8	5				18
-0.10																
0.10	14	3	2													19
0.15	88	1	1													90
0.20	37															37
0.25	3															3
0.30	1															1
0.35																
SUM	143	4	3					1	2	2	8	5				169
MIN	1600.4	147.2	458.7	1142.6	1147.5	1179.9	1203.0	1426.4	1311.3	799.1	274.9	37.5	3.5	0.2	0.	12425.9

TABLE LXVI.  $n_x$  PEAKS FOR CYCLIC DEFLECTION VERSUS  $n_x$  BY MISSION SEGMENT, SAMPLE II

NX PEAKS FOR CYCLIC DFLECTN VS NX PY MISS. SEG. ASCENT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.20										
-0.15			1	4	1					6
-0.10										
0.10				5						5
0.15			2	11	17	1				31
0.20			1	3	12					16
0.25			1		1					2
0.30										
SUM			5	23	31	1				60

NX PEAKS FOR CYCLIC DFLECTN VS NX PY MISS. SEG. DESCNT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.20										
-0.15			4	3	1					8
-0.10										
0.10			1	2	6					9
0.15			1	12	19					32
0.20				4	9	1				14
0.25										
0.30					1					1
0.35										
SUM			6	21	36	1				64

NX PEAKS FOR CYCLIC DFLECTN VS NX PY MISS. SEG. STEADY										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20					1					1
-0.15					4					4
-0.10										
0.10					5					5
0.15					26	1				27
0.20					7					7
0.25					1					1
0.30										
SUM					44	1				45

NX PEAKS FOR CYCLIC DFLECTN VS NX PY MISS. SEG. SUM										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20					1					1
-0.15			5	7	6					18
-0.10										
0.10			1	7	11					19
0.15			3	23	62	2				90
0.20			1	7	28	1				37
0.25			1		2					3
0.30					1					1
0.35										
SUM			11	44	111	3				169

TABLE LXVII.  $n_y$  PEAKS FOR AIRSPEED VERSUS  $n_y$  BY WEIGHT, SAMPLE II

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 21000																
	LESS	40	50	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15		1									1					4
-0.10																
0.10	1						1	2	1	1	2					10
0.15										1						1
0.20																
SUM	3	1					3	2	1	2	3					15
WINS	50.9	26.1	7.3	9.6	14.7	17.3	25.6	34.4	32.0	26.6	14.8	1.8	0.	0.	0.	260.7

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 23000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20							1									1
-0.15	4	10	7	4	6	7	5	1	3	3						50
-0.10																
0.10	14			2		1	1	5	2	4		1				30
0.15	3															4
0.20	1							1								1
0.25																
SUM	22	10	7	6	6	8	7	7	5	7		1				86
WINS	327.2	172.2	73.3	97.1	120.5	206.7	332.3	432.4	428.2	262.6	80.0	16.4	2.7	0.	0.	2562.5

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 25000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15	7	4	3	4	4	7	6	7	1	4	1					48
-0.10																
0.10	5	1	1			5	1	5	5	1	1	1				32
0.15																
SUM	12	5	4	4	4	12	13	12	6	5	2	1				90
WINS	470.7	200.6	94.6	129.5	189.5	345.7	497.7	544.3	534.1	323.4	106.4	15.3	0.3	0.	0.	3452.0

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 27000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20							1									1
-0.15	2	1		1	1	1	1	3	4	1	1					18
-0.10																
0.10	3	1			1		2	1	3	1						13
0.15																
SUM	5	2		1	4	1	5	4	7	2	1					32
WINS	126.8	63.2	34.3	62.0	53.4	80.6	140.2	196.5	236.5	153.8	62.6	3.4	0.5	0.2	0.	1225.4

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 29000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15										1						2
-0.10																
SUM					1					1						2
WINS	40.0	5.2	6.5	5.1	7.0	7.5	4.5	19.1	54.4	22.5	11.1	0.5	0.	0.	0.	187.6

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 31000																
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15		1														1
-0.10																
SUM		1														1
WINS	64.4	28.2	20.6	3.1	8.4	8.2	1.6	0.8	0.1	0.	0.	0.	0.	0.	0.	139.7



TABLE LXVII - Concluded

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 33000																	
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-C.20																	1
-O.15	1																1
-C.10																	1
C.10	1																2
C.15	2																2
SUM	51.5	39.9	7.6	23.4	37.6	21.0	7.1	1.3	0.1	0.	0.	0.	0.	0.	0.	189.7	
MIN																	
NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 35000																	
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-C.25																	1
-C.20						1											4
-C.15	1						1										6
-C.10																	6
C.10	6																11
O.15	7					1	2										11
SUM	41.9	46.3	29.1	57.4	49.1	26.6	6.5	2.9	0.3	0.	0.	0.	0.	0.	0.	260.5	
MIN																	
NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 36000																	
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-C.25																	1
-C.20			1														12
-O.15		5	4				2	1									9
-C.10																	22
O.10	6	1	1	1													22
O.15	6	6	6	1			2	1									510.6
SUM	55.2	45.9	64.3	86.7	83.1	54.8	23.5	24.0	18.4	3.2	0.	0.	0.	0.	0.	910.6	
MIN																	
NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 37000																	
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-C.20																	6
-C.15	2	3		1													11
-O.10							1										2
C.10	8	2															19
O.15	2																19
C.20	12	5		1		1											871.9
SUM	94.3	104.5	136.4	182.9	192.7	89.3	36.2	13.3	5.2	0.	0.	0.	0.	0.	0.	871.9	
MIN																	
NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 38000																	
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-C.25																	1
-C.20					1												12
-O.15	3	1	2	3	2	1											14
-C.10																	27
C.10	13	1															908.9
C.15	16	2	2	3	2	1											908.9
SUM	109.9	171.0	147.5	153.2	167.7	98.4	36.1	24.1	1.0	0.	0.	0.	0.	0.	0.	908.9	
MIN																	
NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 39000																	
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-C.20																	7
-O.15	1	1	3	1	1												18
-C.10																	2
C.10	12	1	2		2	1											27
O.15	2																868.8
C.20	15	2	5	1	2	1											868.8
SUM	87.9	154.7	151.5	174.1	190.6	84.9	42.4	22.6	0.	0.	0.	0.	0.	0.	0.	868.8	
MIN																	
NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 40000																	
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM	
-C.20																	23
-O.15	4	10	3	4	1	1											39
-C.10																	1
O.10	33	4	2														63
O.15	1																987.7
O.20																	987.7
SUM	38	14	5	4	1	1											987.7
MIN	145.1	241.4	170.9	198.3	109.2	68.8	37.0	10.0	1.0	0.	0.	0.	0.	0.	0.	987.7	

TABLE LXVIII.  $n_y$  PEAKS FOR AIRSPEED VERSUS  $n_y$  BY ALTITUDE, SAMPLE II

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE LESS															
	LESS	40	50	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15		1	1													2
-0.10																
-0.05		6				1										7
0.00																
0.05		7	1			1										9
SUM		7	1			1										9
MEANS	62.6	8.5	1.4	0.6	0.4	2.3	2.1	0.9	0.7	0.1	0.1	0.	0.	0.	0.	79.8

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 1000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15		3	3	1	2	1	2		1	1	1					15
-0.10																
-0.05		27	1				1									29
0.00																
0.05		30	4	1	2	1	3		1	1	1					44
SUM		30	4	1	2	1	3		1	1	1					44
MEANS	532.7	145.4	4.3	35.7	33.4	30.8	22.6	14.8	6.2	6.1	1.3	1.2	0.3	0.2	0.	849.6

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 2000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20																
-0.15		23	32	1	15	1	1	1	11	7	8	3				164
-0.10																
-0.05		69	10	6	2	1	4	13	13	7	6	2	2			137
0.00		7									1					9
0.05		4														2
0.10																
0.15																
0.20																
0.25																
SUM		101	42	29	17	2	19	28	25	14	15	5	2			317
MEANS	1387.2	1162.3	850.4	1053.9	499.2	846.9	481.1	973.6	901.2	553.9	203.8	28.5	2.8	0.	0.	4549.7

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 5000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.20																
-0.15																
-0.10		1			1	1	1									7
-0.05																
0.00					1		2	1		4	1	1				10
0.05																
0.10																
0.15																
0.20																
SUM		1			1		3	4		4	1	1				17
MEANS	11.3	43.1	54.6	92.5	111.7	144.8	29.1	137.1	400.2	238.0	67.7	7.8	2.4	0.	0.	1906.8

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 10000															
	LESS	40	60	65	70	75	80	85	90	95	100	105	110	115	120	SUM
-0.25																
-0.20																
-0.15		27	37	2	17	15	17	16	12	4	4	3				188
-0.10																
-0.05		102	11	6	3		8	14	13	11	7	3	2			183
0.00		7							1		1					9
0.05		4														2
0.10																
0.15																
0.20																
0.25																
SUM		233	48	27	21	2	28	32	26	14	17	6	2			387
MEANS	201.9	1473.6	244.7	1142.6	143.7	1119.7	120.0	1326.4	1011.1	794.1	274.9	37.5	3.5	0.2	0.	12429.9

TABLE LXIX.  $n_y$  PEAKS FOR CYCLIC DEFLECTION VERSUS  $n_y$  BY MISSION SEGMENT, SAMPLE II

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. ASCENT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20			2	2						4
-0.15		2	36	42	5					86
-0.10										
0.10			11	19	23		1			54
0.15										
SUM		2	49	63	29		1			144

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. MANUVR										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.20										
-0.15			1	2						3
-0.10										
0.10				4						4
0.15										
SUM			1	6						7

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. DESCNT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20					1					1
-0.15		1	14	35	37					83
-0.10										
0.10			8	25	33	3				69
0.15				1	1	1				3
0.20										
SUM		1	22	61	69	4				156

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. STEADY										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.20										
-0.15					16					16
-0.10										
0.10					55	1				56
0.15					6					6
0.20					2					2
0.25										
SUM					79	1				80

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. SUM										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20			2	2	1					5
-0.15		3	51	79	55					188
-0.10										
0.10			19	48	111	4	1			183
0.15				1	7	1				9
0.20					2					2
0.25										
SUM		3	72	130	176	5	1			387

TABLE LXX.  $n_x$  PEAKS FOR  $n_x$  VERSUS  $n_z$ , SAMPLE II

NX PEAKS FOR NX VS NZ															SUM
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	
1.3															
1.2						1	1		1						2
0.8					1	17		19	88	37	3	1			168
C.7															
C.6									1						1
0.5															
SUM					1	18		19	90	37	3	1			169

TABLE LXXI.  $n_x$  PEAKS FOR  $n_y$  VERSUS  $n_x$ , SAMPLE II

NX PEAKS FOR NY VS NX															SUM
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	
-C.25															
-C.20							1								1
-C.15							18								18
-C.10															
0.10							19								19
C.15						1	89								90
C.20							37								37
0.25							3								3
C.30							1								1
0.35															
SUM						1	168								169

TABLE LXXII.  $n_y$  PEAKS FOR  $n_x$  VERSUS  $n_y$ , SAMPLE II

NY PEAKS FOR NX VS NY															SUM
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	
-C.25															
-C.20							4		1						5
-C.15							138	38	10	2					188
-C.10															
C.10							76	54	49	4					183
C.15							2		7						9
C.20									2						2
0.25															
SUM							220	92	69	6					387

TABLE LXXIII.  $n_y$  PEAKS FOR  $n_y$  VERSUS  $n_z$ , SAMPLE II

NY PEAKS FOR NY VS NZ															SUM
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	
1.4															
1.3							1								1
1.2							2								2
C.8					1	185		178	3	2					378
C.7								4							4
C.6															
C.5								1							1
C.4															
SUM					5	186		183	9	2					387

TABLE LXXIV.  $n_z$  PEAKS FOR  $n_x$  VERSUS  $n_z$ , SAMPLE II

nZ MANEUVER PEAKS FOR nx VS nZ															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
1.8															
1.7									1						1
1.6															
1.5									2	1					3
1.4							1	3	3	1					8
1.3							7	4	6	1					18
1.2							167	42	80	4					293
C.8															
C.7						1	133	13	17						164
C.6							7	1	1						9
C.5							1		1						2
C.4															
SUM						1	316	63	111	7					499

TABLE LXXV.  $n_z$  PEAKS FOR  $n_y$  VERSUS  $n_z$ , SAMPLE II

nZ MANEUVER PEAKS FOR ny VS nZ															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
1.8															
1.7							1								1
1.6															
1.5							3								3
1.4							8								8
1.3							18								18
1.2						1	292								293
C.8															
C.7							163	1							164
C.6							9								9
C.5							1	1							2
C.4															
SUM						1	499	2							499

#### LITERATURE CITED

1. Clay, Larry E., Braun, Joseph F., Chestnutt, David, and Bartek, Louis R., UH-1B HELICOPTER FLIGHT LOADS INVESTIGATION PROGRAM, Technology Incorporated; USAAVLABS Technical Report 66-46, U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, May 1966, AD 634502.
2. Braun, Joseph F., Giessler, F. Joseph, Chestnutt, David, and Bartek, Louis R., CH-54A SKYCRANE HELICOPTER FLIGHT LOADS INVESTIGATION PROGRAM, Technology Incorporated; USAAVLABS Technical Report 66-58, U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, June 1966, AD 638364.
3. Braun, Joseph F., and Giessler, F. Joseph, CH-47A CHINOOK FLIGHT LOADS INVESTIGATION PROGRAM, Technology Incorporated; USAAVLABS Technical Report 66-68, U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, July 1966, AD 640142.
4. Giessler, F. Joseph, and Braun, Joseph F., FLIGHT LOADS INVESTIGATION OF COMBAT ARMED AND ARMORED CH-47A HELICOPTERS OPERATING IN SOUTHEAST ASIA, Technology Incorporated; USAAVLABS Technical Report 68-1, U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, March 1968, AD 671672.
5. Giessler, F. Joseph, and Braun, Joseph F., FLIGHT LOADS INVESTIGATION OF CARGO AND TRANSPORT CH-47A HELICOPTERS OPERATING IN SOUTHEAST ASIA, Technology Incorporated; USAAVLABS Technical Report 68-2, U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, April 1968, AD 672842.
6. Giessler, F. Joseph, Nash, John F., and Rockafellow, Ronald I., FLIGHT LOADS INVESTIGATION OF AH-1G HELICOPTERS OPERATING IN SOUTHEAST ASIA, Technology Incorporated; USAAVLABS Technical Report 70-51, U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, September 1970.
7. von Mises, Richard, THEORY OF FLIGHT, McGraw Hill Book Company, Inc., New York, 1945, p. 11.

Unclassified

Security Classification

DOCUMENT CONTROL DATA - R & D		
(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)		
1. ORIGINATING ACTIVITY (Corporate author) Technology Incorporated Dayton, Ohio		2a. REPORT SECURITY CLASSIFICATION Unclassified
		2b. GROUP
3. REPORT TITLE FLIGHT LOADS INVESTIGATION OF CH-54A HELICOPTERS OPERATING IN SOUTHEAST ASIA		
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Final Report		
5. AUTHOR(S) (First name, middle initial, last name) F. Joseph Giessler John F. Nash Ronald I. Rockafellow		
6. REPORT DATE January 1971	7a. TOTAL NO. OF PAGES 552	7b. NO. OF REFS 7
8a. CONTRACT OR GRANT NO. DAAJ02-68-C-0075	9a. ORIGINATOR'S REPORT NUMBER(S) USAAVLABS Technical Report 70-73	
8b. PROJECT NO. Task 1F162204A14607	9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
8c.		
8d.		
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11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY Eustis Directorate U.S. Army Air Mobility R&D Laboratory Fort Eustis, Virginia
13. ABSTRACT During a structural flight loads program on six CH-54A helicopters operating in the Vietnam theater, 1048 hours of 11-channel flight data were recorded between August 1968 and February 1970. To study the adequacy of a 200-hour data sample, as well as to derive appropriate environmental loads spectra, two sets of valid data, one representing 204 hours and the second 207 hours, were processed and analyzed according to four distinct flight phases, termed mission segments: (1) takeoff and ascent; (2) maneuver; (3) descent, flare, and landing; and (4) steady state. Data are presented in the form of time and occurrence tables, histograms, and exceedance curves. These data indicate the time spent in the mission segments and parameter ranges; the number of peak parameter values occurring in the ranges of the given parameter, during each of the mission segments, and in the ranges of one or more related parameters; and the time to reach or exceed given maneuver and gust normal load factors. The analysis of the two sets of data presentations revealed that the two samples differed little and compared closely in their distribution of the flight data.		

DD FORM 1473

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Unclassified

Security Classification

14	KEY WORDS	LINK A		LINK B		LINK C	
		ROLE	WT	ROLE	WT	ROLE	WT
	CH-54A helicopters flight loads multichannel data aircraft structures operational airloads						